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*Ingenuity for life*



December 2019

# SIMATIC Ident Configuration Guide

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## Important notes:

*All selection possibilities of this SIMATIC Ident Configuration Guide can also be found in the **TIA Selection Tool**. This tool is available at:*

<http://www.siemens.com/tst>

### *Other functional highlights of the selection tool:*

- Create order lists
- Get price information by application to the mall
- Select other automation components (control devices, IO-Systems, industrial communication)
- Network view of all components
- Retrieve and compare technical data
- ... and much more

*All current wireless approvals can be found on the Internet at:*

<http://www.siemens.com/rfid-approvals>




*The newest version of this configuration guide is published at:*




<https://support.industry.siemens.com.....67384964>




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## Each SIMATIC RF Family has characteristics that orients it to a particular range of applications:

- The first step is to understand the application by asking the right questions. Out of this process, the best-suited SIMATIC RF family can be determined
- A reader and tag combination within the specific family can be selected using the SIMATIC RF family matrix pages
- Within the chosen family, a network interface to the control system can be selected using the system interfaces pages




Technology	HF $\longrightarrow$ UHF		
What is the basic RF technology?	<b>RF200</b>  13.56 MHz Passive	<b>RF300</b>  13.56 MHz Passive	<b>RF600</b>  868/915 MHz Passive




Read Distance	Shorter $\longrightarrow$ Longer		
How far away can the tag be from the reader antenna system and still be seen?	<b>RF300</b>  210 mm	<b>RF200</b>  650 mm	<b>RF600</b>  8 meters




Tag Memory	Less $\longrightarrow$ More		
How many bytes are required to be stored on the tag?	<b>RF600</b>  384 bytes	<b>RF200</b>  8 kbytes	<b>RF300</b>  64 kbytes




Metal Effects	Direct Mount $\longrightarrow$ Spacer Mount		
Do tags and reader need to be mounted on or around metal?	<b>RF300</b>  Direct with reduction	<b>RF600</b>  Direct with reduction	<b>RF200</b>  Spacer Mount




Tag Dimensions	Smallest $\longrightarrow$ Largest		
What is the smallest tag size available?	<b>RF200</b>  Ø 4 x 5 mm	<b>RF300</b>  Ø 4 x 5 mm	<b>RF600</b>  Ø 21 x 20 mm



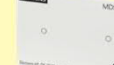


















Environment	Heavy $\longleftarrow$ Heavy		
What kind of environmental extremes will the tags be subjected to?	<b>RF200</b>  220° C IP68	<b>RF300</b>  220° C IP68	<b>RF600</b>  230° C IP68

Reader Dimensions	Smallest $\longrightarrow$ Largest		
How much space will there be for mounting the reader/ antenna?	<b>RF200</b>  M8 x 38	<b>RF300</b>  M12 x 40	<b>RF600</b>  75 x 75 x 20

Multitag Mode	Less $\longrightarrow$ More		
Will there be more than one tag in the RF field at a time?	<b>RF200</b>  1	<b>RF300</b>  1	<b>RF600</b>  100+



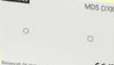











Tag Speed	Slower $\longrightarrow$ Faster		
How fast will the tag be traveling through the RF field?	<b>RF200</b>  26 kbits/sec	<b>RF300</b>  100 kbits/sec	<b>RF600</b>  300 kbits/sec

Air Interface Protocol	Siemens $\longrightarrow$ Standard		
Are there any requirements regarding the air interface protocol?	<b>RF300</b>  Siemens/ ISO15693/14443	<b>RF200</b>  ISO 15693	<b>RF600</b>  ISO 18000 -62/ -63

<b>RF200 Family Matrix</b> 13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>Antennas</b>	<b>D165</b> 6GT2 600-1AB00-0AX0 112 byte EEPROM    -25°C to 85°C 86 x 54 x 0.3 IP65	<b>D261</b> 6GT2 600-1AA01-0AX0 256 byte EEPROM    -25°C to 85°C 55 x 55 x 0.3 IP65	<b>D100</b> 6GT2 600-0AD10 112 byte FFPR0M    -25°C to 80°C 85,6 x 54 x 0.9 IP68	<b>D200</b> 6GT2 600-1AD00 -0AX0 256 byte EEPROM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D400</b> 6GT2 600-4AD00 2 kbyte FRAM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D160</b> 6GT2 600-0AB10 112 byte EEPROM    -40°C to 175°C Ø 16 x 3 IP68/IPx9K	<b>D460</b> 6GT2 600-4AB00 2 kbyte FRAM    -40°C to 100°C Ø 16 x 3 IP67/IPx9K	<b>D560</b> 6GT2 600-5AB00 8 kbyte FRAM    -40°C to 90°C Ø 16 x 3 IP68/IPx9K		
<b>RF210R/ RF210M</b> 6GT2 821-1AC10, RS422 6GT2 821-1AC32 / -1BC32, IO-Lirk* 6GT2 823-0AA00, Handheld (RS422)  	<b>Integrated</b>  M18 x 71								1-10/ 12 (0.04-0.39/ 0.47)	1-8/ 9 (0.04-0.31/ 0.35)	1-8/ 9 (0.04-0.31/ 0.35)
<b>RF220R</b> 6GT2 821-2AC10, RS422 6GT2 821-2AC32 / -2BC32, IO-Link*  	<b>Integrated</b>  M30 x 71								1-20/ 22 (0.04-0.79/ 0.87)	1-18/ 20 (0.04-0.71/ 0.79)	1-18/ 20 (0.04-0.71/ 0.79)
<b>RF240R</b> 6GT2 821-4AC10, RS422 6GT2 821-4AC40, RS232 (ASCII) 6GT2821-4AC32 / -4BC32, IO-Link*  	<b>Integrated</b>  50 x 50 x 30	2-80/ 94 (0.08-3.15/ 3.70)	2-60/ 70 (0.08-2.36/ 2.76)	2-84/ 95 (0.08-3.31/ 3.74)	2-69/ 78 (0.08-2.72/ 3.07)	2-80/ 90 (0.08-3.15/ 3.54)	1-33/ 37 (0.04-1.30/ 1.46)	1-30/ 34 (0.04-1.18/ 1.34)	1-30/ 34 (0.04-1.18/ 1.34)		
<b>RF250R ANT 1</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CB00, ANT 1  	 75 x 75 x 20	5-95/ 110 (0.20-3.74/ 4.33)	2-90/ 110 (0.08-3.54/ 4.33)	5-95/ 115 (0.20-3.74/ 4.53)	5-90/ 100 (0.20-3.54/ 3.94)	10-95/ 110 (0.39-3.74/ 4.33)	2-35/ 45 (0.08-1,38/ 1.77)	2-30/ 40 (0.08-1.18/ 1.57)	2-30/ 40 (0.08-1.18/ 1.57)		
<b>RF250R ANT 3</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD40-0AX0, ANT 3  	 28 x 50 x 10								1-23/ 30 (0.04-0.91/1.18)	0-21/ 27 (0-0.83/ 1.06)	0-21/ 27 (0-0.83/ 1.06)
<b>RF250R ANT 3S</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD60-0AX0, ANT 3S  	 28 x 50 x 10										
<b>RF250R ANT 8</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CF10, ANT 8  	 Ø8 x 40										
<b>RF250R ANT 12</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CC00, ANT 12**  	 Ø12 x 40								0-12/ 17 (0-0.47/ 0.67)	1-10/ 14 (0.04-0.39/ 0.55)	1-10/ 14 (0.04-0.39/ 0.55)
<b>Accessories</b>				Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)		

**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)




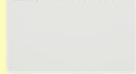
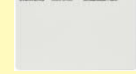












<b>RF200 Family Matrix</b> 13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>Antennas</b>	<b>D165</b> 6GT2 600-1AB00-0AX0 112 byte EEPROM    -25°C to 85°C 86 x 54 x 0.3 IP65	<b>D261</b> 6GT2 600-1AA01-0AX0 256 byte EEPROM    -25°C to 85°C 55 x 55 x 0.3 IP65	<b>D100</b> 6GT2 600-0AD10 112 byte EEPROM    -25°C to 80°C 85,6 x 54 x 0.9 IP68	<b>D200</b> 6GT2 600-1AD00 -0AX0 256 byte EEPROM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D400</b> 6GT2 600-4AD00 2 kbyte FRAM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D160</b> 6GT2 600-0AB10 112 byte EEPROM    -40°C to 175°C Ø 16 x 3 IP68/IPx9K	<b>D460</b> 6GT2 600-4AB00 2 kbyte FRAM    -40°C to 100°C Ø 16 x 3 IP67/IPx9K	<b>D560</b> 6GT2 600-5AB00 8 kbyte FRAM    -40°C to 90°C Ø 16 x 3 IP68/IPx9K
<b>RF250R ANT 18</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CA00, ANT 18**  	 Ø18 x 55						1-18/ 26 (0.04-0.71/ 1.02)	1-17/ 21 (0.04-0.67/ 0.83)	1-17/ 21 (0.04-0.67/ 0.83)
<b>RF250R ANT 30</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD00, ANT 30**  	 Ø30 x 58						1-23/ 30 (0.04-0.91/ 1.18)	1-21/ 27 (0.04-0.83/ 1.06)	1-21/ 27 (0.04-0.83/ 1.06)
<b>RF260R</b> 6GT2 821-6AC10, RS422 6GT2 821-6AC40, RS232 (ASCII) 6GT2 821-6AC32 / -6BC32, IO-Link*  	<b>Integrated</b>	2-120/ 135 (0.08-4.72/ 5.31)	2-75/ 90 (0.08-2.95/ 3.54)	2-110/ 130 (0.08-4.33/ 5.12)	2-100/ 120 (1.18-3.94/ 4.72)	2-110/ 140 (0.08-4.33/ 5.51)	2-40/ 45 (0.08-1.57/ 1.77)	2-40/45 (0.08-1.57/ 1.77)	2-40/45 (0.08-1.57/ 1.77)
<b>RF280R</b> 6GT2 821-8AC10, RS422 6GT2 821-8AC40, RS232 (ASCII)  	<b>Integrated</b>	10 -160/ 190 (0.39-6.3/ 7.48)	20-110/ 150 (0.79-4.33/ 5.91)	10-160/ 200 (0.39-6.3/ 7.87)	20-140/ 185 (0.79-5.51/ 7.28)	5-170/ 200 (0.20-6.69/ 7.87)	2-55/ 70 (0.08-2.17/ 2.76)	2-55/ 70 (0.08-2.17/ 2.76)	2-55/ 70 (0.08-2.17/ 2.76)
<b>Accessories</b>				Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)

\*not with Tags D5xx

\*\* antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)




















### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

RF200 Family Matrix 13.56 MHz Passive Tags	Antennas	D165	D261	D100	D200	D400	D160	D460	D560	
		6GT2 600-1AB00-0AX0 112 byte EEPROM  -25°C to 85°C 86 x 54 x 0.3 IP65	6GT2 600-1AA01-0AX0 256 byte EEPROM  -25°C to 85°C 55 x 55 x 0.3 IP65	6GT2 600-0AD10 112 byte FFPR0M  -25°C to 80°C 85,6 x 54 x 0.9 IP68	6GT2 600-1AD00 -0AX0 256 byte EEPROM  -20°C to 60°C 85.6 x 54 x 0.8 IP67	6GT2 600-4AD00 2 kbyte FRAM  -20°C to 60°C 85.6 x 54 x 0.8 IP67	6GT2 600-0AB10 112 byte EEPROM  -40°C to 175°C Ø 16 x 3 IP68/IPx9K	6GT2 600-4AB00 2 kbyte FRAM  -40°C to 100°C Ø 16 x 3 IP67/IPx9K	6GT2 600-5AB00 8 kbyte FRAM  -40°C to 90°C Ø 16 x 3 IP68/IPx9K	
<b>RF285R</b> 6GT2821-7AC12, RS232   <b>Accessory:</b> Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20	10-150/200 (0.39-5.91/ 7.87)	5-130/180 (0.20-5.12/ 7.09)	10-150/200 (0.39-5.91/ 7.87)	10-130/180 (0.39-5.12/ 7.09)	10-130/180 (0.39-5.12/ 7.09)	0-65/90 (0-2.56/ 3.54)	0-60/85 (0-2.36/ 3.35)	0-60/85 (0-2.36/ 3.35)	
	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110	0-300/380 (0-11.81/ 14.96)	0-300/380 (0-11.81/ 14.96)	0-350/450 (0-13.78/ 17.72)	0-350/450 (0-13.78/ 17.72)	0-320/420 (0-12.60/ 16.54)	0-110/140 (0-4.33/ 5.51)	0-100/120 (0-3.94/ 4.72)	0-110/140 (0-4.33/ 5.51)	
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110	0-350/450 (0-13.78/ 17.72)	0-300/400 (0-11.81/ 15.75)	0-450/550 (0-17.72/ 21.65)	0-350/450 (0-13.78/ 17.72)	0-400/500 (0-15.75/ 19.69)				
<b>RF290R</b> 6GT2 821-0AC12, RS232, RS422   <b>Accessory:</b> Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20	10-180/ 250 (0.39-7.09/ 9.84)	5-130/ 180 (0.39-5.12/ 7.09)	10-180/ 250 (0.39-7.09/ 9.84)	10-170/240 (0.39-6.69/ 9.45)	10-170/240 (0.39-6.69/ 9.45)	0-65/90 (0-2.56/ 3.54)	0-60/85 (0-2.36/ 3.35)	0-60/85 (0-2.36/ 3.35)	
	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110	0-350/ 450 (0-13.78/ 17.72)	0-300/ 400 (0-11.81 / 15.75)	0-400/ 500 (0-15.75/ 19.69)	0-400/ 500 (0-15.75/ 19.69)	0-400/ 500 (0-15.75/ 19.69)	0-130/ 180 (0-5.12/ 7.09)	0-120/ 160 (0-4.72/ 6.30)	0-120/ 160 (0-4.72/ 6.30)	
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110	0-400/ 500 (0-15.75/ 19.69)	0-350/ 450 (0-13.78 / 17.72)	0-550/ 650 (0-21.65/ 25.59)	0-500/ 600 (0-19.69/ 23.62)	0-500/ 650 (0-19.69/ 25.59)				
	<b>ANT D10</b>  6GT2 698-5AF00 1150 x 365 x 115	0-350/ 450 (0-13.78/ 17.72)	0-350/ 450 (0-13.78 / 17.72)	0-500/ 600 (0-19.69/ 23.62)	0-450/ 550 (0-17.72/ 21.65)	0-400/ 500 (0-15.75/ 19.69)				
<b>Accessories</b>	Covering hood for ANT D6 (6GT2 690-0AD00)			Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00) Angle pattern body (6GT2690-0AN00)	

### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)













Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF200 Family Matrix</b>  13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>Antennas</b>	<b>D117</b> 6GT2 600-0AG00 112 byte EEPROM    -40°C to 125°C Ø4 x 5.2 IP68 IPx9K	<b>D127</b> 6GT2 600-0AF00 112 byte EEPROM    -40°C to 125°C Ø6 x 5.8 IP68/ IPx9K	<b>D421</b> 6GT2 600-4AE00 2 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D521</b> 6GT2 600-5AE00 8 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D422</b> 6GT2 600-4AF00 2 kbyte FRAM    -40°C to 100°C Ø20 x 6 IP68	<b>D522</b> 6GT2600-5AF00 6GT2600-5AF00-0AX0 8 kbyte FRAM    -40°C to 100°C Ø20 x 6 ; Ø18 x 5.2 IP68
<b>RF210R/ RF210M</b> 6GT2 821-1AC10, RS422 6GT2 821-1AC32 / -1BC32, IO-Link* 6GT2 823-0AA00, Handheld (RS422) 	<b>Integrated</b>  M18 x 71		0-2/ 2 (0-0.08/ 0.08)	0-3/ 4 (0.0-0.12/ 0.16)	0-3/ 4 (0-0.12/ 0.16)	1-9/ 10 (0.04-0.35/ 0.39)	1-8/ 9 (0.04-0.31/ 0.35)
<b>RF220R</b> 6GT2 821-2AC10, RS422 6GT2 821-2AC32 / -2BC32, IO-Link* 	<b>Integrated</b>  M30 x 71					1-12/ 14 (0.04-0.47/ 0.55)	1-10/ 12 (0.04-0.39/ 0.47)
<b>RF240R</b> 6GT2 821-4AC10, RS422 6GT2 821-4AC40, RS232 (ASCII) 6GT2821-4AC32 / -4BC32, IO-Link* 	<b>Integrated</b>  50 x 50 x 30					1-12/ 15 (0.04-0.47/ 0.59)	1-10/ 12 (0.04-0.39/ 0.47)
<b>RF250R ANT 1</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CB00, ANT 1 	 75 x 75 x 20						
<b>RF250R ANT 3</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD40-0AX0, ANT 3 	 28 x 50 x 10					1-12/ 15 (0.04-0.47/ 0.59)	1-12/ 15 (0.04-0.47/ 0.59)
<b>RF250R ANT 3S</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD60-0AX0, ANT 3S 	 28 x 50 x 10	0-2/ 3 (0-0.08/ 0.12)	0-2/ 3 (0-0.08/ 0.12)	0-3/ 4 (0-0.12/ 0.16)	0-3/ 4 (0-0.12/ 0.16)		
<b>RF250R ANT 8</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CF10, ANT 8 	 Ø8 x 40	0-2/ 3 (0-0.08/ 0.12)	0-3/ 4 (0-0.12/ 0.16)	0-3/ 4 (0-0.12/ 0.16)	0-3/ 4 (0-0.12/ 0.16)		
<b>RF250R ANT 12</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CC00, ANT 12** 	 Ø12 x 40	0-3/ 4 (0-0.12/ 0.16)	0-4/ 5 (0-0.16/ 0.2)	0-3/ 4 (0-0.12/ 0.16)	0-3/ 4 (0-0.12/ 0.16)	0-7/ 10 (0-0.28/ 0.39)	1-7/ 9 (0.04-0.28/ 0.35)
<b>Accessories</b>							

Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)



<b>RF200 Family Matrix</b>  13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>Antennas</b>	<b>D117</b> 6GT2 600-0AG00 112 byte EEPROM    -40°C to 125°C Ø4 x 5.2 IP68 IPx9K	<b>D127</b> 6GT2 600-0AF00 112 byte EEPROM    -40°C to 125°C Ø 6 x 5.8 IP68/ IPx9K	<b>D421</b> 6GT2 600-4AE00 2 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D521</b> 6GT2 600-5AE00 8 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D422</b> 6GT2 600-4AF00 2 kbyte FRAM    -40°C to 100°C Ø20 x 6 IP68	<b>D522</b> 6GT2600-5AF00 6GT2600-5AF00-0AX0 8 kbyte FRAM    -40°C to 100°C Ø20 x 6 ; Ø18 x 5.2 IP68
<b>RF250R ANT 18</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CA00, ANT 18**	  Ø18 x 55			0-3/ 5 (0-0.12/ 0.20)	0-4/ 5 (0-0.16/ 0.20)	1-8/ 14 (0.04-0.31/ 0.55)	1-10/ 12 (0.04-0.39/ 0.47)
<b>RF250R ANT 30</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD00, ANT 30**	  Ø30 x 58					0-12/ 15 (0-0.47/ 0.59)	1-12/ 15 (0.04-0.47/ 0.59)
<b>RF260R</b> 6GT2 821-6AC10, RS422 6GT2 821-6AC40, RS232 (ASCII) 6GT2 821-6AC32 / -6BC32, IO-Link*	 <b>Integrated</b> 75 x 75 x 41						
<b>RF280R</b> 6GT2 821-8AC10, RS422 6GT2 821-8AC40, RS232 (ASCII)	 <b>Integrated</b> 160 x 96 x 41						
<b>Accessories</b>							
















\*not with Tags D5xx

\*\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**





















Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)



<b>RF200 Family Matrix</b>  13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>Antennas</b>	<b>D117</b> 6GT2 600-0AG00 112 byte EEPROM    -40°C to 125°C Ø4 x 5.2 IP68 IPx9K	<b>D127</b> 6GT2 600-0AF00 112 byte EEPROM    -40°C to 125°C Ø6 x 5.8 IP68/ IPx9K	<b>D421</b> 6GT2 600-4AE00 2 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D521</b> 6GT2 600-5AE00 8 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D422</b> 6GT2 600-4AF00 2 kbyte FRAM    -40°C to 100°C Ø20 x 6 IP68	<b>D522</b> 6GT2600-5AF00 6GT2600-5AF00-0AX0 8 kbyte FRAM    -40°C to 100°C Ø20 x 6 ; Ø18 x 5.2 IP68
<b>RF285R</b> 6GT2821-7AC12, RS232    <b>Accessory:</b> Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20						
	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110						
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110						
<b>RF290R</b> 6GT2 821-0AC12, RS232, RS422    <b>Accessory:</b> Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20						
	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110						
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110						
	<b>ANT D10</b>  6GT2 698-5AF00 1150 x 365 x 115						
<b>Accessories</b>	Covering hood for ANT D6 (6GT2 690-0AD00)						














Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF200 Family Matrix</b>  13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>Antennas</b>	<b>D124</b> 6GT2 600-0AC10 112 byte EEPROM  -40°C to 180°C Ø 27 x 4 IP68/ IPx9K	<b>D324</b> 6GT2 600-3AC00 992 byte EEPROM  -40°C to 140°C Ø 27 x 4 IP67	<b>D424</b> 6GT2 600-4AC00 2 kbyte FRAM  -40°C to 100°C Ø 27 x 4 IP67/ IPx9K	<b>D524</b> 6GT2 600-5AC00 8 kbyte FRAM  -40°C to 100°C Ø 27 x 4 IP67/ IPx9K	<b>D126</b> 6GT2 600-0AE00 112 byte EEPROM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D426</b> 6GT2 600-4AH00 2 kbyte FRAM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D526</b> 6GT2 600-5AH00 8 kbyte FRAM  -40°C to 100°C Ø 50 x 3.6 IP68
<b>RF210R/ RF210M</b> 6GT2 821-1AC10, RS422 6GT2 821-1AC32 / -1BC32, IO-Link* 6GT2 823-0AA00, Handheld (RS422) 	<b>Integrated</b>  M18 x 71	1-18/ 20 (0.04-0.71/ 0.79)	1-8/ 9 (0.04-0.31/ 0.35)	1-16/ 18 (0.04-0.63/ 0.71)	1-15/ 17 (0.04-0.59/ 0.67)			
<b>RF220R</b> 6GT2 821-2AC10, RS422 6GT2 821-2AC32 / -2BC32, IO-Link* 	<b>Integrated</b>  M30 x 71	1-28/ 31 (0.04-1.10/ 1.22)	2-21/ 25 (0.08-0.83/ 0.98)	2-25/ 29 (0.08-0.98/ 1.14)	2-22/ 25 (0.08-0.87/ 0.98)	2-30/ 35 (0.08-1.18/ 1.38)	2-25/ 30 (0.08-0.98/ 1.18)	2-25/ 30 (0.08-0.98/ 1.18)
<b>RF240R</b> 6GT2 821-4AC10, RS422 6GT2 821-4AC40, RS232 (ASCII) 6GT2821-4AC32 / -4BC32, IO-Link* 	<b>Integrated</b>  50 x 50 x 30	2-53/ 60 (0.08-2.09/ 2.36)	1-36/ 40 (0.04-1.42/ 1.57)	1-47/ 53 (0.04-1.85/ 2.09)	1-45/ 55 (0.04-1.77/ 2.17)	2-57/ 65 (0.08-2.24/ 2.56)	2-45/ 55 (0.08-1.77/ 2.17)	2-45/ 55 (0.08-1.77/ 2.17)
<b>RF250R ANT 1</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CB00, ANT 1 	 75 x 75 x 20	2-60/ 75 (0.08-2.36/ 2.95)	5-60/ 70 (0.20-2.36/ 2.76)	2-70/ 80 (0.08-2.76/ 3.15)	1-65/ 80 (0.04-2.56/ 3.15)	2-80/ 95 (0.08-3.15/ 3.74)	2-80/ 95 (0.08-3.15/ 3.74)	2-80/ 95 (0.08/3.15/ 3.74)
<b>RF250R ANT 3</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD40-0AX0, ANT 3 	 28 x 50 x 10	2-32/ 40 (0.08-1.26/ 1.57)	2-22/ 35 (0.08-0.87/ 1.38)	0-34/ 48 (0-1.34/ 1.89)	1-35/ 40 (0.04-1.38/ 1.57)	0-47/ 60 (0-1.85/ 2.36)	0-44/ 58 (0-1.73/ 2.28)	2-35/ 45 (0.08-1.38/ 1.77)
<b>RF250R ANT 3S</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD60-0AX0, ANT 3S 	 28 x 50 x 10							
<b>RF250R ANT 8</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CF10, ANT 8 	 Ø8 x 40							
<b>RF250R ANT 12</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CC00, ANT 12** 	 Ø12 x 40							
<b>Accessories</b>		Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)

**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)


















<b>RF200 Family Matrix</b>		<b>Antennas</b>	<b>D124</b>	<b>D324</b>	<b>D424</b>	<b>D524</b>	<b>D126</b>	<b>D426</b>	<b>D526</b>
<b>13.56 MHz Passive Tags</b>  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating			6GT2 600-0AC10 112 byte EEPROM   -40°C to 180°C Ø 27 x 4 IP68/ IPx9K	6GT2 600-3AC00 992 byte EEPROM   -40°C to 140°C Ø 27 x 4 IP67	6GT2 600-4AC00 2 kbyte FRAM   -40°C to 100°C Ø 27 x 4 IP67/ IPx9K	6GT2 600-5AC00 8 kbyte FRAM   -40°C to 100°C Ø 27 x 4 IP67/ IPx9K	6GT2 600-0AE00 112 byte EEPROM   -40°C to 100°C Ø 50 x 3.6 IP68	6GT2 600-4AH00 2 kbyte FRAM   -40°C to 100°C Ø 50 x 3.6 IP68	6GT2 600-5AH00 8 kbyte FRAM   -40°C to 100°C Ø 50 x 3.6 IP68
<b>RF250R ANT 18</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CA00, ANT 18**			0-24/ 37 (0.0-0.94/ 1.46)	1-18/ 27 (0.04-0.71/ 1.06)	1-27/ 36 (0.04-1.06/ 1.42)	1-25/ 30 (0.04-0.98/ 1.18)			
<b>RF250R ANT 30</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD00, ANT 30**			1-35/ 48 (0.08-1.38/ 1.89)	1-22/ 35 (0.04-0.87/ 1.38)	0-34/ 48 (0-1.34/ 1.89)	1-35/ 40 (0.04-1.38/ 1.57)	0-47/ 60 (0-1.85/ 2.36)	0-44/ 58 (0-1.73/ 2.28)	2-35/ 45 (0.08-1.38/ 1.77)
<b>RF260R</b> 6GT2 821-6AC10, RS422 6GT2 821-6AC40, RS232 (ASCII) 6GT2 821-6AC32 / -6BC32, IO-Link*		<b>Integrated</b>	2-80/ 85 (0.08-3.15/ 3.35)	2-60/ 70 (0.08-2.36/ 2.76)	2-60/ 70 (0.08-2.36/ 2.76)	2-60/ 70 (0.08-2.36/ 2.76)	2-75/ 100 (0.08-2.95/ 3.94)	2-70/ 85 (0.08-2.76/ 3.35)	2-70/ 85 (0.08-2.76/ 3.35)
<b>RF280R</b> 6GT2 821-8AC10, RS422 6GT2 821-8AC40, RS232 (ASCII)		<b>Integrated</b>	2-110/ 130 (0.08-4.33/ 5.12)	2-85/ 110 (0.08-3.35/ 4.33)	2-100/ 140 (0.08-3.94/ 5.51)	2-110/ 130 (0.08-4.33/ 5.12)	2-135/ 160 (0.08-5.31/ 6.3)	2-145/ 175 (0.08-5.71/ 6.89)	2-135/ 165 (0.08-5.31/ 6.5)
<b>Accessories</b>			Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)

\*not with Tags D5xx

\*\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)





















### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF200 Family Matrix</b>		<b>Antennas</b>	<b>D124</b> 6GT2 600-0AC00 112 byte EEPROM  -40°C to 180°C Ø 27 x 4 IP68/ IPx9K	<b>D324</b> 6GT2 600-3AC00 992 byte EEPROM  -40°C to 140°C Ø 27 x 4 IP67	<b>D424</b> 6GT2 600-4AC00 2 kbyte FRAM  -40°C to 100°C Ø 27 x 4 IP67/ IPx9K	<b>D524</b> 6GT2 600-5AC00 8 kbyte FRAM  -40°C to 100°C Ø 27 x 4 IP67/ IPx9K	<b>D126</b> 6GT2 600-0AE00 112 byte EEPROM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D426</b> 6GT2 600-4AH00 2 kbyte FRAM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D526</b> 6GT2 600-5AH00 8 kbyte FRAM  -40°C to 100°C Ø 50 x 3.6 IP68
<b>RF285R</b> 6GT2821-7AC12, RS232   <b>Accessory:</b> Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20	0-100/140 (0-3.94/ 5.51)	0-90/130 (0-3.54/ 5.12)	0-90/130 (0-3.54/ 5.12)	0-90/130 (0-3.54/ 5.12)	5-110/150 (0.20-4.34/ 5.91)	5-100/140 (0.20-3.94/ 5.51)	5-100/140 (0.20-3.94/ 5.51)	
	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110	0-180/240 (0-7.09/ 9.45)	0-150/200 (0-5.91/ 7.87)	0-180/240 (0-7.09/ 9.45)	0-180/240 (0-7.09/ 9.45)	0-300/380 (0-11.81/ 14.96)	0-250/320 (0-9.84/ 12.60)	0-250/320 (0-9.84/ 12.60)	
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110	0-200/280 (0-7.87/ 11)	0-180/240 (0-7.09/ 9.45)	0-200/280 (0-7.87/ 11)	0-200/250 (0-7.87/ 9.84)	0-350/450 (0-13.78/ 17.72)	0-300/380 (0-11.81/ 14.96)	0-300/380 (0-11.81/ 14.96)	
	<b>RF290R</b> 6GT2 821-0AC12, RS232, RS422   <b>Accessory:</b> Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20	0-100/ 140 (0-3.94/ 5.51)	0-90/ 130 (0-3.54/ 5.12)	0-90/ 130 (0-3.54/ 5.12)	0-90/ 130 (0.00-3.54/ 5.12)	5-110/150 (0.20-4.34/ 5.91)	5-100/ 140 (0.20-3.94/ 5.51)	5-100/ 140 (0.20-3.94/ 5.51)
<b>RF290R</b> 6GT2 821-0AC12, RS232, RS422   <b>Accessory:</b> Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110	0-200/ 280 (0-7.87/ 11)	0-200/ 280 (0-7.87/ 11)	0-200/ 280 (0-7.87/ 11)	0-200/ 280 (0-7.87/ 11)	0-350/ 400 (0-13.78/ 15.75)	0-300/ 350 (0-11.81/ 13.78)	0-300/ 350 (0-11.81/ 13.78)	
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110	0-220/ 300 (0-8.66/ 11.81)	0-200/ 280 (0-7.87/ 11)	0-220/ 300 (0-8.66/ 11.81)	0-220/ 300 (0-8.66/ 11.81)	0-400/ 500 (0-15.75/ 19.69)	0-350/ 400 (0-13.78/ 15.75)	0-350/ 400 (0-13.78/ 15.75)	
	<b>ANT D10</b>  6GT2 698-5AF00 1150 x 365 x 115	0-200/ 280 (0-7.87/ 11)	0-200/ 280 (0-7.87/ 11)	0-200/ 280 (0-7.87/ 11)	0-220/ 300 (0-8.66/ 11.81)	0-400/ 500 (0-15.75/ 19.69)	0-350/ 400 (0-13.78/ 15.75)	0-350/ 400 (0-13.78/ 15.75)	
<b>Accessories</b>	Covering hood for ANT D6 (6GT2 690-0AD00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)	














**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF200 Family Matrix</b>  13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>Antennas</b>	<b>D423</b> 6GT2 600-4AA00 2 kbyte FRAM  -40°C to 100°C Ø 30 x 8 IP68/ IPx9K	<b>D425</b> 6GT2 600-4AG00 2 kbyte FRAM  -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	<b>D525</b> 6GT2 600-5AG00 8 kbyte FRAM  -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	<b>D428</b> 6GT2 600-4AK00-0AX0 2 kbyte FRAM  -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	<b>D528</b> 6GT2600-5AK00 8 kbyte FRAM  -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	<b>D139</b> 6GT2 600-0AA10 112 byte EEPROM  Ex -40°C to 220°C Ø 85 x 15 IP68/ IPx9K	<b>D339</b> 6GT2600-3AA10 992 byte EEPROM  Ex -40°C to 220°C Ø 85 x 15 IP68/ IPx9K
<b>RF210R/ RF210M</b> 6GT2 821-1AC10, RS422 6GT2 821-1AC32 / -1BC32, IO-Link* 6GT2 823-0AA00, Handheld (RS422) 	<b>Integrated</b>  M18 x 71	2-10/ 12 (0,08-0.39/ 0.47)	1-6/ 7 (0.04-0.24/ 0.28)	1-6/ 7 (0.04-0.24/ 0.28)	1-10/ 11 (0.04-0.39/ 0.43)	1-10/ 11 (0.04-0.39/ 0.43)		
<b>RF220R</b> 6GT2 821-2AC10, RS422 6GT2 821-2AC32 / -2BC32, IO-Link* 	<b>Integrated</b>  M30 x 71	2-24/ 28 (0,08-0.95/ 1.1)	1-11/ 13 (0.04-0.43/ 0.51)	1-11/ 13 (0.04-0.43/ 0.51)	1-18/ 21 (0.04-0.71/ 0.83)	1-15/ 20 (0.04-0.59/ 0.79)		
<b>RF240R</b> 6GT2 821-4AC10, RS422 6GT2 821-4AC40, RS232 (ASCII) 6GT2821-4AC32 / -4BC32, IO-Link* 	<b>Integrated</b>  50 x 50 x 30	2-35/ 40 (0.08-1.37/ 1.57)	1-15/ 17 (0.04-0.59/ 0.67)	1-15/ 17 (0.04-0.59/ 0.67)	1-30/ 34 (0.04-1.18/ 1.34)	1-30/ 35 (0.04-1.18/ 1.38)		
<b>RF250R ANT 1</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CB00, ANT 1 	 75 x 75 x 20	2-35/ 45 (0.08-1.37/ 1.77)	2-25/ 30 (0.08-0.98/ 1.18)	2-25/ 30 (0.08-0.98/ 1.18)	2-40/ 50 (0.08-1.57/ 1.97)	2-40/ 45 (0.08-1.57/ 1.77)	5-90/ 105 (0.2-3.54/ 4.13)	2-85/ 100 (0.08-3.35/ 3.94)
<b>RF250R ANT 3</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD40-0AX0, ANT 3 	 28 x 50 x 10	0-24/ 30 (0-0.95/ 1.18)	0-12/ 20 (0-0.47/ 0.79)	1-12/ 20 (0.04-0.47/ 0.79)	1-20/ 32 (0.04-0.79/ 1.26)	1-20/ 25 (0.04-0.79/ 0.98)		
<b>RF250R ANT 3S</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD60-0AX0, ANT 3S 	 28 x 50 x 10							
<b>RF250R ANT 8</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CF10, ANT 8 	 Ø8 x 40							
<b>RF250R ANT 12</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CC00, ANT 12** 	 Ø12 x 40		0-8/ 10 (0.0-0.31/ 0.39)	1-8/ 10 (0.04-0.31/ 0.39)	1-8/ 12 (0.04-0.31/ 0.47)	1-8/ 12 (0.04-0.31/ 0.47)		
<b>Accessories</b>		Mounting cover (6GT2 690-0AE00)					Spacer (6GT2 690-0AA00) Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)	Spacer (6GT2 690-0AA00) Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)

**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

















RF200 Family Matrix  13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	Antennas	D423	D425	D525	D428	D528	D139	D339
		6GT2 600-4AA00 2 kbyte FRAM  -40°C to 100°C Ø 30 x 8 IP68/ IPx9K	6GT2 600-4AG00 2 kbyte FRAM  -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	6GT2 600-5AG00 8 kbyte FRAM  -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	6GT2 600-4AK00-0AX0 2 kbyte FRAM  -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	6GT2600-5AK00 8 kbyte FRAM  -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	6GT2 600-0AA10 112 byte EEPROM  Ex -40°C to 220°C Ø 85 x 15 IP68/ IPx9K	6GT2600-3AA10 992 byte EEPROM  Ex -40°C to 220°C Ø 85 x 15 IP68/ IPx9K
<b>RF250R ANT 18</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CA00, ANT 18** 	 Ø18 x 55	1-15/ 18 (0.04-0.59/ 0.71)	1-11/ 16 (0.04-0.43/ 0.63)	1-11/ 16 (0.04-0.43/ 0.63)	1-18/ 25 (0.04-0.71/ 0.98)	1-15/ 20 (0.04-0.59/ 0.79)		
<b>RF250R ANT 30</b> 6GT2 821-5AC10, RS422 6GT2 821-5AC40, RS232 (ASCII) 6GT2821-5AC32 / -5BC32, IO-Link* 6GT2 398-1CD00, ANT 30** 	 Ø30 x 58	0-18/ 26 (0-0.71/ 1.02)	1-12/ 20 (0.04-0.47/ 0.79)	1-12/ 20 (0.04-0.47/ 0.79)	1-20/ 32 (0.04-0.79/ 1.26)	1-20/ 25 (0.04-0.79/ 0.98)		
<b>RF260R</b> 6GT2 821-6AC10, RS422 6GT2 821-6AC40, RS232 (ASCII) 6GT2 821-6AC32 / -6BC32, IO-Link* 	<b>Integrated</b> 75 x 75 x 41	2-40/ 45 (0.08-1.57/ 1.77)			2-40/ 45 (0.08-1.57/ 1.77)	2-35/ 40 (0.08-1.38/ 1.57)	2-80/ 110 (0.08-3.15/ 4.33)	5-65/ 80 (0.20-2.56/ 3.15)
<b>RF280R</b> 6GT2 821-8AC10, RS422 6GT2 821-8AC40, RS232 (ASCII) 	<b>Integrated</b> 160 x 96 x 41	5-60/ 70 (0.20-2.36/ 2.76)	2-30/ 40 (0.08-1.18/ 1.57)	2-30/ 40 (0.08-1.18/ 1.57)	2-60/ 88 (0.08-2.36/ 3.46)	2-60/ 85 (0.08-2.36/ 3.35)	5-150/ 190 (0.20-5.91/ 7.48)	5-150/ 170 (0.20-5.91/ 6.69)
<b>Accessories</b>		Mounting cover (6GT2 690-0AE00)					Spacer (6GT2 690-0AA00) Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)	Spacer (6GT2 690-0AA00) Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)

\*not with Tags D5xx

\*\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

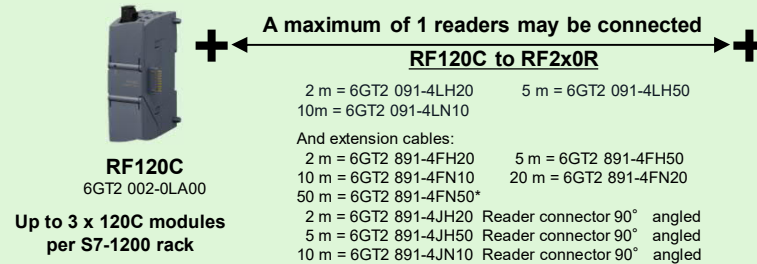
RF200 Family Matrix  13.56 MHz Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	Antennas	D423	D425	D525	D428	D528	D139	D339	
		6GT2 600-4AA00 2 kbyte FRAM  -40°C to 100°C Ø 30 x 8 IP68/ IPx9K	6GT2 600-4AG00 2 kbyte FRAM  -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	6GT2 600-5AG00 8 kbyte FRAM  -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	6GT2 600-4AK00-0AX0 2 kbyte FRAM  -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	6GT2600-5AK00 8 kbyte FRAM  -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	6GT2 600-0AA10 112 byte EEPROM  Ex -40°C to 220°C Ø 85 x 15 IP68/IPx9K	6GT2600-3AA10 992 byte EEPROM  Ex -40°C to 220°C Ø 85 x 15 IP68/IPx9K	
<b>RF285R</b> 6GT2821-7AC12, RS232    Accessory: Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20	10-60/85 (0.39-2.36/ 3.35)				0-55/80 (0-2.17/ 3.15)	0-55/80 (0-2.17/ 3.15)	5-160/220 (0.20-6.30/ 8.66)	5-130/170 (0.20-5.12/ 6.69)
	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110							0-350/450 (0-13.78/ 17.72)	0-280/350 (0-11.02/ 13.78)
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110							0-450/550 (0-17.72/ 21.65)	0-350/450 (0-13.78/ 17.72)
<b>RF290R</b> 6GT2 821-0AC12, RS232, RS422    Accessory: Set for top rail mounting 6GK5798-8ML00-0AB3	<b>ANT D1</b>  6GT2 698-5AC00 75 x 75 x 20	10-60/85 (0.39-2.36/ 3.35)				0-55/ 80 (0-2.17/ 3.15)	0-55/ 80 (0-2.17/ 3.15)	5-160/ 220 (0.20-6.30/ 8.66)	5-130/170 (0.20-5.12/ 6.69)
	<b>ANT D5</b>  6GT2 698-5AA10 380 x 380 x 110							0-400/ 500 (0-15.75/ 19.69)	0-300/ 380 (0-11.81/ 15.00)
	<b>ANT D6</b>  6GT2 698-5AB00 580 x 480 x 110							0-500/ 600 (0-19.69/ 23.62)	0-400/ 480 (0-15.75/ 18.9)
	<b>ANT D10</b>  6GT2 698-5AF00 1150 x 365 x 115							0-450/ 550 (0-17.72/ 21.65)	0-300/ 380 (0-11.81/ 15.00)
<b>Accessories</b>	Covering hood for ANT D6 (6GT2 690-0AD00)	Mounting cover (6GT2 690-0AE00)					Spacer (6GT2 690-0AA00) Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)	Spacer (6GT2 690-0AA00) Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)	

Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

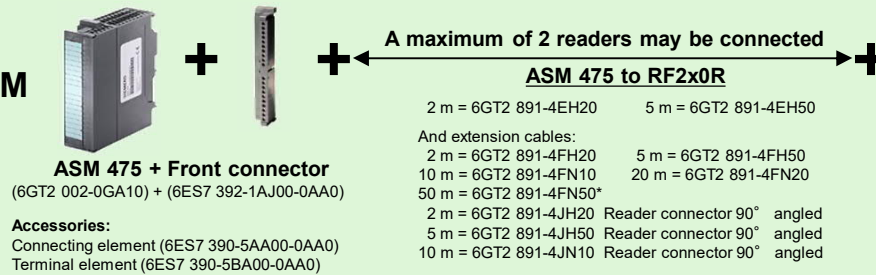
Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)



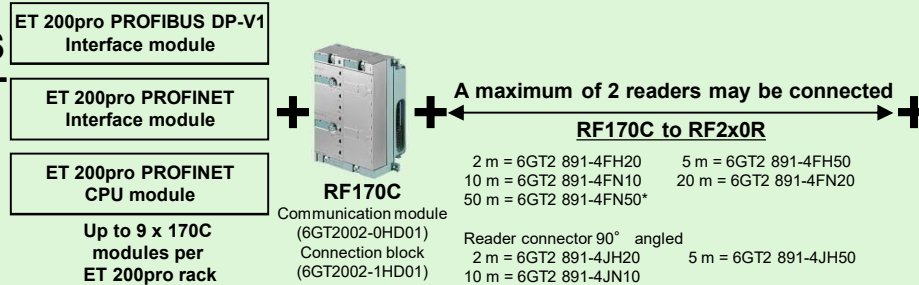
### SIMATIC PLC S7-1200



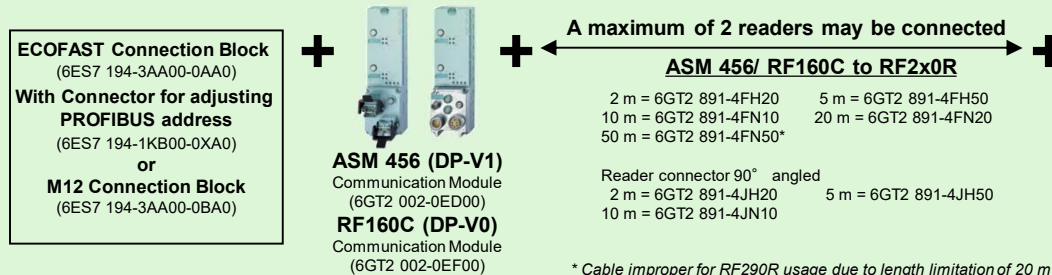
### SIMATIC PLC S7-300 Rack or S7-400 via ET 200M (DP-V1/PN-IO)



### ET 200pro via PROFIBUS or PROFINET or S7 PLC

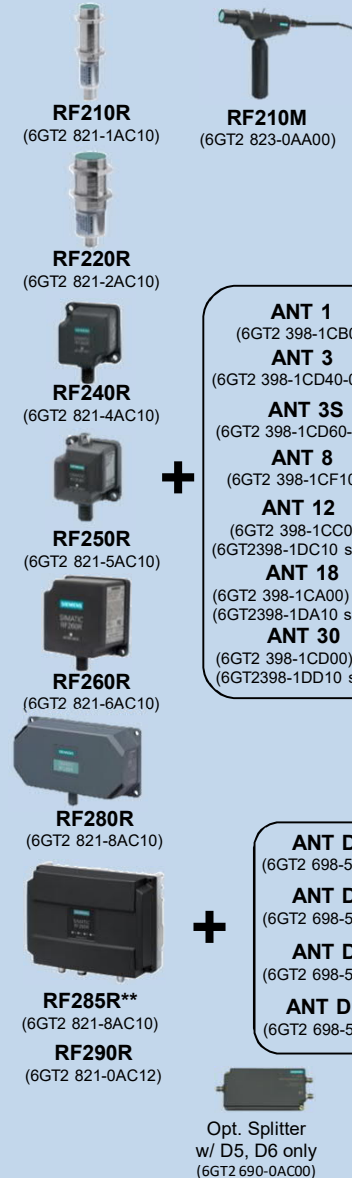


### PROFIBUS



### Reader

powered through connection cable



### Tags



\*\*do not use with D10 ; do not use with Splitter

# RF200 System Interfaces

## PROFINET & OPC UA

### Communication Modules



**RF185C** (6GT2 002-0JE10) **RF186C** (6GT2 002-0JE20) **RF188C** (6GT2 002-0JE40)

A maximum of  
**1 reader at RF185C,**  
**2 readers at RF186C/CI,**  
**4 readers at RF188C/CI**  
**of RF2x0R may be connected**

2 m = 6GT2 891-4FH20      5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10    20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50\*

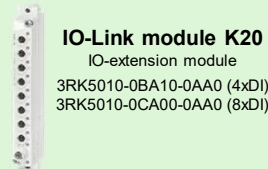
Reader connector 90° angled:  
 2 m = 6GT2 891-4JH20      5 m = 6GT2 891-4JH50  
 10 m = 6GT2 891-4JN10

### Additional IOs



**RF186CI** (6GT2 002-0JE50) **RF188CI** (6GT2 002-0JE60)

**RF18xCI to sensor**  
 1.5 m = 3RK1902-4PB15-3AA0  
 5 m = 6GT2 891-4MH50  
 10 m = 6GT2 891-4MN10



**IO-Link module K20**  
 IO-extension module  
 3RK5010-0BA10-0AA0 (4xDI)  
 3RK5010-0CA00-0AA0 (8xDI)

Or one  
**Standard sensor**  
 Or one  
**Actor**

## Ethernet TCP/IP



Ethernet TP cable through switch. See Page 75 for RF182C Cabling/ Connectors



**RF182C**  
 Communication Module  
 (6GT2 002-0JD10)

Computers and non Siemens PLCs

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 Push Pull RJ45 (6GT2 002-2JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

A maximum of 2 readers may be connected  
**RF182C to RF2x0R**

2 m = 6GT2 891-4FH20      5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10    20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50\*

Reader connector 90° angled  
 2 m = 6GT2 891-4JH20      5 m = 6GT2 891-4JH50  
 10 m = 6GT2 891-4JN10

## Ethernet/IP

**RFID 181EIP**  
 Communication Module  
 (6GT2 002-0JD20)



**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

A maximum of 2 readers may be connected  
**RFID 181EIP to RF2x0R**

2 m = 6GT2 891-4FH20      5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10    20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50\*

Reader connector 90° angled  
 2 m = 6GT2 891-4JH20      5 m = 6GT2 891-4JH50  
 10 m = 6GT2 891-4JN10

\* Cable improper for RF290R usage due to length limitation of 20 m

## Reader

powered through connection cable



**RF210R**  
 (6GT2 821-1AC10)



**RF210M**  
 (6GT2 823-0AA00)



**RF220R**  
 (6GT2 821-2AC10)



**RF240R**  
 (6GT2 821-4AC10)



**RF250R**  
 (6GT2 821-5AC10)



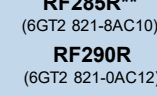
**RF260R**  
 (6GT2 821-6AC10)



**RF280R**  
 (6GT2 821-8AC10)



**RF285R\*\***  
 (6GT2 821-8AC10)



**RF290R**  
 (6GT2 821-0AC12)

- ANT 1** (6GT2 398-1CB00)
- ANT 3** (6GT2 398-1CD40-0AX0)
- ANT 3S** (6GT2 398-1CD60-0AX0)
- ANT 8** (6GT2 398-1CF10)
- ANT 12** (6GT2 398-1CC00) (6GT2398-1DC10 steel)
- ANT 18** (6GT2 398-1CA00) (6GT2398-1DA10 steel)
- ANT 30** (6GT2 398-1CD00) (6GT2398-1DD10 steel)

- ANT D1** (6GT2 698-5AC00)
- ANT D5** (6GT2 698-5AA10)
- ANT D6** (6GT2 698-5AB00)
- ANT D10** (6GT2 698-5AF00)

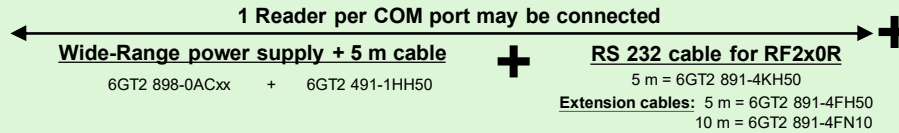
Opt. Splitter w/ D5, D6 only (6GT2 690-0AC00)

\*\*do not use with D10 ; do not use with Splitter

## Tags

- D100** (6GT2 600-0AD10)
- D200** (6GT2 600-1AD00-0AX0)
- D400** (6GT2 600-4AD00)
- D421** (6GT2 600-4AE00)
- D521** (6GT2 600-5AE00)
- D422** (6GT2 600-4AF00)
- D522** (6GT2 600-5AF00)
- D522** (6GT2 600-5AF00-0AX0)
- D124** (6GT2 600-0AC10)
- D324** (6GT2 600-3AC00)
- D424** (6GT2 600-4AC00)
- D524** (6GT2 600-5AC00)
- D423** (6GT2 600-4AA00)
- D425** (6GT2 600-4AG00)
- D525** (6GT2 600-4AB00)
- D127** (6GT2 600-4AF00)
- D117** (6GT2 398-1CF00)
- D428** (6GT2 600-4AK00-0AX0)
- D528** (6GT2600-5AK00)
- D126** (6GT2 600-0AE00)
- D426** (6GT2 600-4AH00)
- D526** (6GT2 600-5AH00)
- D139** (6GT2 600-0AA10)
- D339** (6GT2 600-3AA10)
- D160** (6GT2 600-0AB10)
- D460** (6GT2 600-4AB00)
- D560** (6GT2600-5AB00)
- D165** (6GT2 600-1AB00-0AX0)
- D261** (6GT2 600-1AA01-0AX0)

## RS232 / ASCII



Simple text based protocol

## Reader

with external power supply at Y-cable



**RF240R**  
(6GT2 821-4AC40)



**RF250R**  
(6GT2 821-5AC40)



**RF260R**  
(6GT2 821-6AC40)



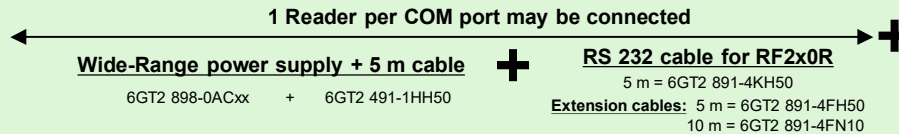
**RF280R**  
(6GT2 821-8AC40)

- ANT 1**  
(6GT2 398-1CB00)
- ANT 3**  
(6GT2 398-1CD40-0AX0)
- ANT 3S**  
(6GT2 398-1CD60-0AX0)
- ANT 8**  
(6GT2 398-1CF10)
- ANT 12**  
(6GT2 398-1CC00)  
(6GT2398-1DC10 steel)
- ANT 18**  
(6GT2 398-1CA00)  
(6GT2398-1DA10 steel)
- ANT 30**  
(6GT2 398-1CD00)  
(6GT2398-1DD10 steel)

## Tags

- D100** (6GT2 600-0AD10)
- D200** (6GT2 600-1AD00-0AX0)
- D400** (6GT2 600-4AD00)
- D421** (6GT2 600-4AE00)
- D521** (6GT2 600-5AE00)
- D422** (6GT2 600-4AF00)
- D522** (6GT2 600-5AF00)
- D522** (6GT2 600-5AF00-0AX0)
- D124** (6GT2 600-0AC10)
- D324** (6GT2 600-3AC00)
- D424** (6GT2 600-4AC00)
- D524** (6GT2 600-5AC00)
- D423** (6GT2 600-4AA00)
- D425** (6GT2 600-4AG00)
- D525** (6GT2 600-4AB00)
- D127** (6GT2 600-4AF00)
- D117** (6GT2 398-1CF00)
- D428** (6GT2 600-4AK00-0AX0)
- D528** (6GT2600-5AK00)
- D126** (6GT2 600-0AE00)
- D426** (6GT2 600-4AH00)
- D526** (6GT2 600-5AH00)
- D139** (6GT2 600-0AA10)
- D339** (6GT2 600-3AA10)
- D160** (6GT2 600-0AB10)
- D460** (6GT2 600-4AB00)
- D560** (6GT2600-5AB00)
- D165** (6GT2 600-1AB00-0AX0)
- D261** (6GT2 600-1AA01-0AX0)

## RS232



RF290R Tool for Configuration on DVD  
 Binary based protocol or Scanmode

## Reader

with external power supply at Y-cable



**RF285R\***  
(6GT2 821-8AC10)



**RF290R**  
(6GT2 821-0AC12)

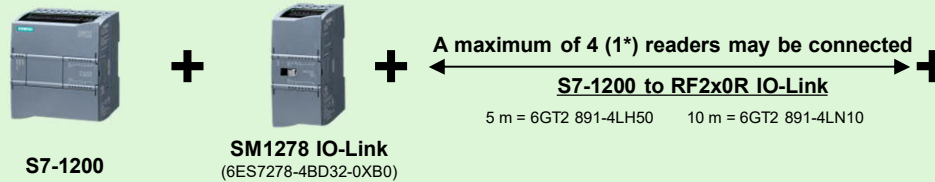
- ANT D1**  
(6GT2 698-5AC00)
- ANT D5**  
(6GT2 698-5AA10)
- ANT D6**  
(6GT2 698-5AB00)
- ANT D10**  
(6GT2 698-5AF00)

Opt. Splitter  
w/ D5, D6 only  
(6GT2 690-0AC00)

**optional antenna cables**  
 10 m = 6GT2691-0CN10  
 7.2 m extension = 6GT2691-0DH72

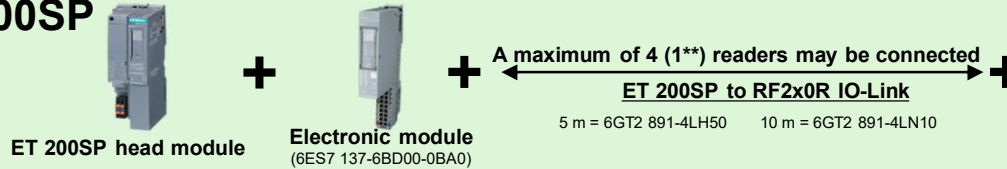
\*do not use with D10 ; do not use with Splitter

## IO-Link: S7-1200



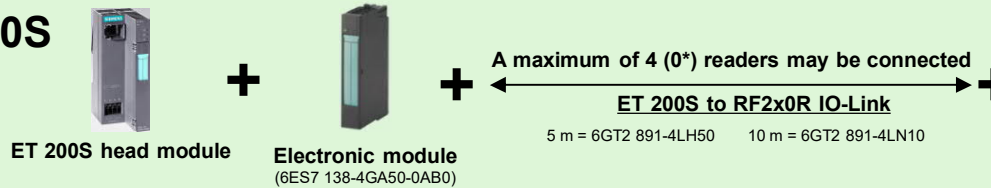
## IO-Link: ET 200SP

via PROFIBUS  
or PROFINET  
or S7 PLC



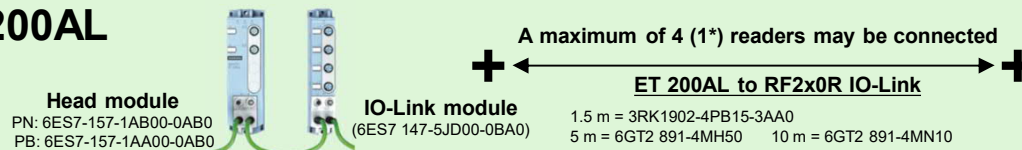
## IO-Link: ET 200S

via PROFIBUS  
or PROFINET  
or S7 PLC



## IO-Link: ET 200AL

via PROFIBUS  
or PROFINET



## IO-Link: ET 200pro

via PROFIBUS  
or PROFINET  
or S7 PLC



\*) for IO-Link reader of type 32 Byte: Some IO-Link Master permit only one or none reader per module  
 \*\*) in case of using a PROFIBUS head module at ET 200SP, only one 32 Byte reader may be connected

## Reader

powered through connection cable



**RF210R IO-Link**  
 6GT2 821-1AC32 (8 Byte)  
 6GT2 821-1BC32 (32 Byte)



**RF220R IO-Link**  
 6GT2 821-2AC32 (8 Byte)  
 6GT2 821-2BC32 (32 Byte)



**RF240R IO-Link**  
 6GT2 821-4AC32 (8 Byte)  
 6GT2 821-4BC32 (32 Byte)



**RF250R IO-Link**  
 6GT2 821-5AC32 (8 Byte)  
 6GT2 821-5BC32 (32 Byte)



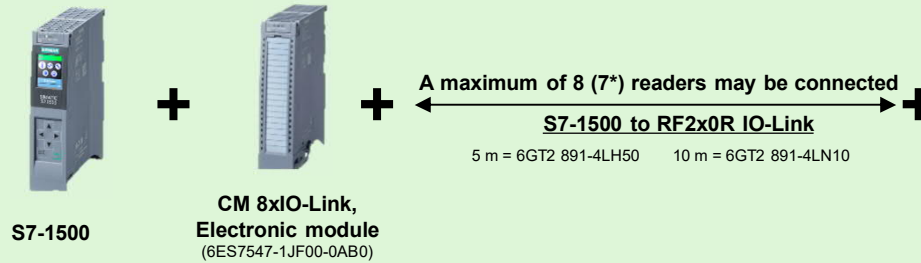
**RF260R IO-Link**  
 6GT2 821-6AC32 (8 Byte)  
 6GT2 821-6BC32 (32 Byte)

## Tags

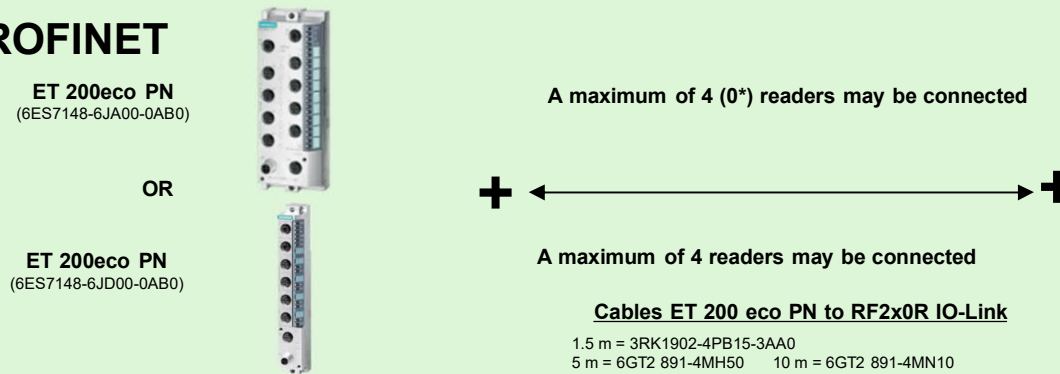
- D100 (6GT2 600-0AD10)
- D200 (6GT2 600-1AD00-0AX0)
- D400 (6GT2 600-4AD00)
- D421 (6GT2 600-4AE00)
- D422 (6GT2 600-4AF00)
- D124 (6GT2 600-0AC10)
- D324 (6GT2 600-3AC00)
- D424 (6GT2 600-4AC00)
- D423 (6GT2 600-4AA00)
- D425 (6GT2 600-4AG00)
- D127 (6GT2 600-4AF00)
- D117 (6GT2 398-1CF00)
- D428 (6GT2 600-4AK00-0AX0)
- D126 (6GT2 600-0AE00)
- D426 (6GT2 600-4AH00)
- D139 (6GT2 600-0AA10)
- D339 (6GT2 600-3AA10)
- D160 (6GT2 600-0AB10)
- D460 (6GT2 600-4AB00)
- D165 (6GT2 600-1AB00-0AX0)
- D261 (6GT2 600-1AA01-0AX0)



## IO-Link: S7-1500



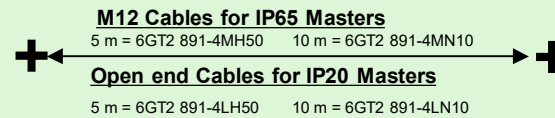
## IO-Link: PROFINET



## IO-Link: Other Master

Vendors of IO-Link Master Devices	Central Controller	Profibus	Profinet	Interbus	EtherCat	Powerlink	Ethernet/IP	Modbus TCP	SERCOS III	CC-Link	CA-Nopen	DeviceNet	AS-Interface	USB
B&R	X	X	X			X	X	X	X		X	X		
Balluff		X	X	X		X			X		X			X
Beckhoff	X	X	X	X	X		X	X	X	X	X	X		
Bosch Rexroth	X	X	X						X					
Control			X				X	X						
ifm electronic GmbH		X	X	X	X								X	X
Mitsubishi Electronic	X													
Murrelektronik		X	X											
OMRON Corporation	X				X									
PhoenixContact	X	X	X	X	X		X	X	X					
Siemens AG	X	X	X											
TMG TE GmbH														X
WAGO	X	X	X		X		X	X	X		X	X		
Wenglor sensoric GmbH		X												X

According to [www.io-link.com](http://www.io-link.com)  
see competency-matrix for all available offers



\*) for IO-Link reader of type 32 Byte:  
Reduced number of reader per module for some types of IO-Link Master

## Reader

powered through connection cable



**RF210R IO-Link**  
6GT2 821-1AC32 (8 Byte)  
6GT2 821-1BC32 (32 Byte)



**RF220R IO-Link**  
6GT2 821-2AC32 (8 Byte)  
6GT2 821-2BC32 (32 Byte)



**RF240R IO-Link**  
6GT2 821-4AC32 (8 Byte)  
6GT2 821-4BC32 (32 Byte)


















**RF250R IO-Link**  
6GT2 821-5AC32 (8 Byte)  
6GT2 821-5BC32 (32 Byte)



**RF260R IO-Link**  
6GT2 821-6AC32 (8 Byte)  
6GT2 821-6BC32 (32 Byte)















## Tags

- D100 (6GT2 600-0AD10)
- D200 (6GT2 600-1AD00-0AX0)
- D400 (6GT2 600-4AD00)
- D421 (6GT2 600-4AE00)
- D422 (6GT2 600-4AF00)
- D124 (6GT2 600-0AC10)
- D324 (6GT2 600-3AC00)
- D424 (6GT2 600-4AC00)
- D423 (6GT2 600-4AA00)
- D425 (6GT2 600-4AG00)
- D127 (6GT2 600-4AF00)
- D117 (6GT2 398-1CF00)
- D428 (6GT2 600-4AK00-0AX0)
- D126 (6GT2 600-0AE00)
- D426 (6GT2 600-4AH00)
- D139 (6GT2 600-0AA10)
- D339 (6GT2 600-3AA10)
- D160 (6GT2 600-0AB10)
- D460 (6GT2 600-4AB00)
- D165 (6GT2 600-1AB00-0AX0)
- D261 (6GT2 600-1AA01-0AX0)

<b>RF300 Family Matrix (RF300 Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>Suitable for Dynamic Operation</b>	<b>RF320T</b> 6GT2 800-1CA00 20 byte EEPROM  -40°C to 140°C Ø 27 x 4 IP67/IPX9K	<b>RF330T</b> 6GT2 800-5BA00 20 byte EEPROM 32 kbyte FRAM  -40°C to 100°C Ø 30 x 8 IP68/IPX9K	<b>RF340T</b> 20 byte EEPROM + 6GT2 800-4BB00 8 kbyte FRAM 6GT2 800-5BB00 32 kByte FRAM  -40°C to 85°C 48 x 25 x 15 IP67/IPX9K	<b>RF350T</b> 6GT2 800-5BD00 20 byte EEPROM 32 kbyte FRAM  -40°C to 85°C 50 x 50 x 20 IP68	<b>RF360T</b> 20 byte EEPROM + 6GT2 800-4AC00 8 kbyte FRAM 6GT2 800-5AC00 32 kbyte FRAM  -40°C to 85°C 85.8 x 54.1 x 2.5 IP67	<b>RF370T</b> 20 Byte EEPROM + 6GT2 800-5BE00 32 kbyte FRAM 6GT2 800-6BE00 64 kbyte FRAM  -40°C to 85°C 75 x 75 x 41 IP68	<b>RF380T</b> 6GT2 800-5DA00 20 byte EEPROM 32 kbyte FRAM  -40°C to 220°C Ø 114 x 83 IP68
<b>RF310R RS422</b> 6GT2801-1BA10 6GT2801-1BA10-0AX1 (90° plate) 6GT2801-1BA10-0AX2 (Ex) 6GT2 801-1BA20-0AX1 (Scanmode) 	<b>Integrated</b>  55 x 75 x 30	<b>YES</b>	1-23/ 26 (0.04-0.91/ 1.02)	2-18/ 21 (0.08-0.71/ 0.83)	2-36/ 41 (0.08-1.42/ 1.61)	2-47/ 53 (0.08-1.85/ 2.09)	2-60/68 (0.08-2.36/ 2.68)	2-45/ 60 (0.08-1.77./ 2.36)	
<b>RF340R RS422</b> 6GT2801-2BA10 6GT2801-2BA10-0AX2 (Ex) 	<b>Integrated</b>  75 x 75 x 41	<b>YES</b>	1-20/ 25 (0.04-0.79/ 0.98)	2-20/ 23 (0.08-0.79/ 0.91)	2-50/ 58 (0.08-1.97/ 2.28)	2-60/ 75 (0.08-2.36/ 2.95)	2-65/ 85 (0.08-2.56/ 3.35)	5-60/ 80 (0.20-2.36/ 3.15)	5-80/ 100 (0.20-3.15/ 3.94)
<b>RF350R ANT 1 RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CB00 (ANT 1) 	  75 x 75 x 20	<b>YES</b>	1-30/ 37 (0.04-1.18/ 1.46)	2-25/ 30 (0.08-0.98/ 1.18)	2-55/ 70 (0.08-2.16/ 2.76)	2-65/ 85 (0.08-2.56/ 3.35)	2-75/ 100 (0.08-2.95/ 3.94)	5-65/ 85 (0.20-2.56/ 3.35)	5-90/ 110 (0.20-3.54/ 4.33)
<b>RF350R ANT 3 RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD40-0AX0 (ANT 3) 	  28 x 50 x 10	<b>NO</b>	1-15/ 18 (0.04-0.59/ 0.71)	1-16/ 20 (0.04-0.63/ 0.79)	2-32/ 40 (0.08-1.26/ 1.57)	2-35/ 42 (0.08-1.38/ 1.65)			
<b>RF350R ANT 3S RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD60-0AX0 (ANT 3S) 	  28 x 50 x 10	<b>NO</b>							
<b>Accessories</b>			Spacer (6GT2 690-0AK00)	Mounting cover (6GT2 690-0AE00)			20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)		Holder: (short: 6GT2 090-0QA00) (long: 6GT2 090-0QA00-0AX3) Cover for holder: (6GT2 090-0QB00) All Purpose Support (6GT2 590-0QA00)

Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)















<b>RF300 Family Matrix (RF300 Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>Suitable for Dynamic Operation</b>	<b>RF320T</b> 6GT2 800-1CA00 20 byte EEPROM  -40°C to 140°C Ø 27 x 4 IP67/IPX9K	<b>RF330T</b> 6GT2 800-5BA00 20 byte EEPROM 32 kbyte FRAM  -40°C to 100°C Ø 30 x 8 IP68/IPX9K	<b>RF340T</b> 20 byte EEPROM + 6GT2 800-4BB00 8 kbyte FRAM 6GT2 800-5BB00 32 kByte FRAM  -40°C to 85°C 48 x 25 x 15 IP67/IPX9K	<b>RF350T</b> 6GT2 800-5BD00 20 byte EEPROM 32 kbyte FRAM  -40°C to 85°C 50 x 50 x 20 IP68	<b>RF360T</b> 20 byte EEPROM + 6GT2 800-4AC00 8 kbyte FRAM 6GT2 800-5AC00 32 kbyte FRAM  -40°C to 85°C 85.8 x 54.1 x 2.5 IP67	<b>RF370T</b> 20 Byte EEPROM + 6GT2 800-5BE00 32 kbyte FRAM 6GT2 800-6BE00 64 kbyte FRAM  -40°C to 85°C 75 x 75 x 41 IP68	<b>RF380T</b> 6GT2 800-5DA00 20 byte EEPROM 32 kbyte FRAM  -40°C to 220°C Ø 114 x 83 IP68
<b>RF350R ANT 12</b> <b>RS422</b>  6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CC00 (ANT 12)*	 Ø12 x 40	<b>NO</b>							
<b>RF350R ANT 18</b> <b>RS422</b>  6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CA00 (ANT 18)*	 Ø18 x 55	<b>NO</b>	0-10/ 13 (0-0.39/ 0.51)	1-11/ 13 (0.04-0.43/ 0.51)	0-18/ 22 (0.0-0.71/ 0.87)				
<b>RF350R ANT 30</b> <b>RS422</b>  6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD00 (ANT 30)*	 Ø30 x 58	<b>NO</b>	0-15/ 20 (0-0.59/ 0.79)	2-15/ 18 (0.08-0.59/ 0.71)	1-25/ 30 (0.04-0.98/ 1.1 8)	0-35/ 40 (0-1.18/ 1.57)	2-32/ 38 (0.08-1.26/ 1.5)		
<b>RF380R</b> <b>RS422, RS232</b>  6GT2801-3BA10 6GT2801-3BA10-0AX2 (Ex)	<b>Integrated</b> 160 x 96 x 41	<b>YES</b>	2-45/ 60 (0.08-1.77/ 2.36)	5-45/ 48 (0.2-1.77/ 1.89)	2-80/ 105 (0.08-3.15/ 4.13)	2-100/ 125 (0.08-3.94/ 4.92)	2-120/ 150 (0.08-4.72/ 5.91)	5-100/ 135 (0.20-3.94/ 5.31)	5-125/ 160 (0.20-4.92/ 6.30)
<b>Accessories</b>			Spacer (6GT2 690-0AK00)	Mounting cover (6GT2 690-0AE00)			20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)		Holder: (short: 6GT2 090-0QA00) (long: 6GT2 090-0QA00- 0AX3) Cover for holder: (6GT2 090-0QB00) All Purpose Support (6GT2 590-0QA00)

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)












Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)



<b>RF300 Family Matrix (ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D165</b> 6GT2 600-1AB00-0AX0 112 byte EEPROM    -25°C to 85°C 86 x 54 x 0.3 IP65	<b>D261</b> 6GT2 600-1AA01-0AX0 256 byte EEPROM    -25°C to 85°C 55 x 55 x 0.3 IP65	<b>D100</b> 6GT2 600-0AD10 112 byte EEPROM    -25°C to 80°C 85,6 x 54 x 0.9 IP68	<b>D200</b> 6GT2 600-1AD00 -0AX0 256 byte EEPROM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D400</b> 6GT2 600-4AD00 2 kbyte FRAM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D160</b> 6GT2 600-0AB10 112 byte EEPROM    -40°C to 175°C Ø 16 x 3 IP68/IPx9K	<b>D460</b> 6GT2 600-4AB00 2 kbyte FRAM    -40°C to 100°C Ø 16 x 3 IP67/IPx9K
<b>RF310R</b> <b>RS422</b> 6GT2801-1BA10 6GT2801-1BA10-0AX1 (90° plate) 6GT2801-1BA10-0AX2 (Ex) 6GT2 801-1BA20-0AX1 (Scanmode)	 <b>Integrated</b> 55 x 75 x 30	2-90/ 102 (0.08-3.54/ 4.02)	2-74/ 83 (0.08-2.91/ 3.27)	2-93/ 105 (0.08-3.66/ 4.1)	2-80/ 90 (0.08-3.15/ 3.54)	2-104/ 115 (0.08-4.09/ 4.53)	1-39/ 44 (0.04-1.54/ 1.73)	1-32/ 38 (0.08-1.26/ 1.50)
<b>RF340R</b> <b>RS422</b> 6GT2801-2BA10 6GT2801-2BA10-0AX2 (Ex)	 <b>Integrated</b> 75 x 75 x 41	15-120/ 140 (0.59-4.72/ 5.51)	15-60/ 70 (0.59-2.36/ 2.76)	5-110/ 140 (0.20-4.33/ 5.51)	10-100/ 115 (0.39-3.94/ 4.53)	2-100/ 130 (0.08-3.93/ 5.12)	2-35/ 60 (0.08-1.38/ 2.36)	2-25/ 40 (0.08-0.98/ 1.57)
<b>RF350R ANT 1</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CB00 (ANT 1)	 75 x 75 x 20	5-100/ 120 (0.20-3.94/ 4.72)	5-80/ 95 (0.20-3.15/ 3.74)	5-110/ 140 (0.20-4.33/ 5.51)	5-95/ 115 (0.20-3.74/ 4.53)	2-110/ 140 (0.08-4.33/ 5.51)	2-35/ 60 (0.08-1.38/ 2.36)	2-32/ 38 (0.08-1.26/ 1.50)
<b>RF350R ANT 3</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD40-0AX0 (ANT 3)	 28 x 50 x 10						1-28/ 35 (0.04-1.10/ 1.38)	1-20/ 28 (0.04-0.79/ 1.10)
<b>RF350R ANT 3S</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD60-0AX0 (ANT 3S)	 28 x 50 x 10							
<b>RF350R ANT 12</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CC00 (ANT 12)*	 Ø12 x 40						0-8/ 12 (0-0.31/ 0.47)	1-8/ 10 (0.04-0.31/ 0.39)
<b>RF350R ANT 18</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CA00 (ANT 18)*	 Ø18 x 55						1-18/ 20 (0.04-0.71/ 0.79)	1-12/ 16 (0.04-0.47/ 0.63)
<b>Accessories</b>				Holder (6GT2 390-0AA00)  20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00)  20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00)  20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)	Spacer (6GT2 690-0AG00)  Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00)  Angle pattern body (6GT2690-0AN00)

**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**















Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF300 Family Matrix (ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D165</b> 6GT2 600-1AB00-0AX0 112 byte EEPROM    -25°C to 85°C 86 x 54 x 0.3 IP65	<b>D261</b> 6GT2 600-1AA01-0AX0 256 byte EEPROM    -25°C to 85°C 55 x 55 x 0.3 IP65	<b>D100</b> 6GT2 600-0AD10 112 byte EEPROM    -25°C to 80°C 85,6 x 54 x 0.9 IP68	<b>D200</b> 6GT2 600-1AD00 -0AX0 256 byte EEPROM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D400</b> 6GT2 600-4AD00 2 kbyte FRAM    -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D160</b> 6GT2 600-0AB10 112 byte EEPROM    -40°C to 175°C Ø 16 x 3 IP68/IPx9K	<b>D460</b> 6GT2 600-4AB00 2 kbyte FRAM    -40°C to 100°C Ø 16 x 3 IP67/IPx9K
<b>RF350R ANT 30</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD00 (ANT 30)*  	 Ø30 x 58						1-24/ 28 (0.04-0.94/ 1.10)	1-18/ 20 (0.04-0.71/ 0.79)
<b>RF380R</b> <b>RS422, RS232</b> 6GT2801-3BA10 6GT2801-3BA10-0AX2 (Ex)  	<b>Integrated</b> 160 x 96 x 41	10-170/ 200 (0.39-6.69/ 7.87)	20-120/ 160 (0.79-4.72/ 6.30)	10-170/ 210 (0.39-6.69/ 8.27)	20-150/195 (0.79-5.90/ 7.67)	10-200/ 240 (0.39-7.87/ 9.45)	2-64/ 80 (0.08-2.52/ 3.15)	2-65/ 90 (0.08-2.56/ 3.54)
<b>RF382R</b> <b>RS422, RS232</b> 6GT2801-3AB20-0AX0  	<b>Integrated</b> 160 x 96 x 41						35-50/ 65 (1.38-1.97/ 2.56)	35-50/ 60 (1.38-1.97/ 2.36)
<b>Accessories</b>				Holder (6GT2 390-0AA00)  20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00)  20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00)  20 mm spacer (6GT2 190-0AA00)  Fixing pocket (6GT2 190-0AB00)	Spacer (6GT2 690-0AG00)  Angle pattern body (6GT2690-0AN00)	Spacer (6GT2 690-0AG00)  Angle pattern body (6GT2690-0AN00)

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)











### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF300 Family Matrix (ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D117</b> 6GT2 600-0AG00 112 byte EEPROM    -40°C to 125°C Ø4 x 5.2 IP68 IPx9K	<b>D127</b> 6GT2 600-0AF00 112 byte EEPROM    -40°C to 125°C Ø 6 x 5.8 IP68/ IPx9K	<b>D421</b> 6GT2 600-4AE00 2 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D422</b> 6GT2 600-4AF00 2 kbyte FRAM    -40°C to 100°C Ø20 x 6 IP68	<b>D124</b> 6GT2 600-0AC10 112 byte EEPROM    -40°C to 180°C Ø 27 x 4 IP68/ IPx9K	<b>D324</b> 6GT2 600-3AC00 992 byte EEPROM    -40°C to 140°C Ø 27 x 4 IP67	<b>D424</b> 6GT2 600-4AC00 2 kbyte FRAM    -40°C to 100°C Ø 27 x 4 IP67/ IPx9K
<b>RF310R</b> <b>RS422</b> 6GT2801-1BA10 6GT2801-1BA10-0AX1 (90° plate) 6GT2801-1BA10-0AX2 (Ex) 6GT2 801-1BA20-0AX1 (Scanmode)	 <b>Integrated</b> 55 x 75 x 30					2-64/ 72 (0.08-2.52/ 2.83)	2-64/ 72 (0.08-2.52/ 2.83)	1-68/ 75 (0.04-2.68/ 2.95)
<b>RF340R</b> <b>RS422</b> 6GT2801-2BA10 6GT2801-2BA10-0AX2 (Ex)	 <b>Integrated</b> 75 x 75 x 41					2-60/ 75 (0.08-2.36/ 2.95)	2-55/ 70 (0.08-2.17/ 2.76)	2-55/ 70 (0.08-2.17/ 2.76)
<b>RF350R ANT 1</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CB00 (ANT 1)	 75 x 75 x 20					2-65/ 85 (0.08-2.56/ 3.35)	2-66/ 78 (0.08-2.60/ 3.07)	2-75/ 88 (0.08-2.95/ 3.46)
<b>RF350R ANT 3</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD40-0AX0 (ANT 3)	 28 x 50 x 10				1-11/18 (0.04-0.43/ 0.71)	1-35/ 42 (0.04-1.38/ 1.65)	1-22/ 32 (0-0.04/ 1.26)	1-40/ 48 (0.04-1.57/ 1.89)
<b>RF350R ANT 3S</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD60-0AX0 (ANT 3S)	 28 x 50 x 10	0-2/ 3 (0.0-0.08/ 0.12)	0-2/ 3 (0-0.08/ 0.12)	0-4/ 5 (0-0.16/ 0.20)				
<b>RF350R ANT 12</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CC00 (ANT 12)*	 Ø12 x 40	0-2/ 3 (0.0-0.08/ 0.12)	0-3/ 4 (0-0.12/ 0.16)	0-3/ 5 (0-0.12/ 0.20)				
<b>RF350R ANT 18</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CA00 (ANT 18)*	 Ø18 x 55	1-5/ 6 (0.04-0.20/ 0.24)	1-5/ 6 (0.04-0.20/ 0.24)	0-6/ 8 (0-0.24/ 0.31)	1-10/ 13 (0.04-0.39/ 0.51)	2-24/ 28 (0.08-0.94/ 1.10)	1-22/ 28 (0.04-0.87/ 1.1)	1-27/ 35 (0.04-1.06/ 1.38)
<b>Accessories</b>						Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)

Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)













Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF300 Family Matrix (ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D117</b> 6GT2 600-0AG00 112 byte EEPROM    -40°C to 125°C Ø4 x 5.2 IP68 IPx9K	<b>D127</b> 6GT2 600-0AF00 112 byte EEPROM    -40°C to 125°C Ø 6 x 5.8 IP68/ IPx9K	<b>D421</b> 6GT2 600-4AE00 2 kbyte FRAM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>D422</b> 6GT2 600-4AF00 2 kbyte FRAM    -40°C to 100°C Ø20 x 6 IP68	<b>D124</b> 6GT2 600-0AC10 112 byte EEPROM    -40°C to 180°C Ø 27 x 4 IP68/ IPx9K	<b>D324</b> 6GT2 600-3AC00 992 byte EEPROM    -40°C to 140°C Ø 27 x 4 IP67	<b>D424</b> 6GT2 600-4AC00 2 kbyte FRAM    -40°C to 100°C Ø 27 x 4 IP67/ IPx9K
<b>RF350R ANT 30</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD00 (ANT 30)*	 Ø30 x 58				0-14/ 16 (0-0.55/ 0.63)	1-35/ 40 (0.04-1.38/ 1.57)	1-35/ 40 (0.04-1.38/ 1.57)	0-45/ 50 (0-1.77/ 1.97)
<b>RF380R</b> <b>RS422, RS232</b> 6GT2801-3BA10 6GT2801-3BA10-0AX2 (Ex)	 <b>Integrated</b> 160 x 96 x 41					1-120/ 140 (0.04-4.72/ 5.51)	2-96/ 120 (0.08-3.78/ 4.72)	2-120/ 140 (0.08-4.72/ 5.51)
<b>RF382R</b> <b>RS422, RS232</b> 6GT2801-3AB20-0AX0	 <b>Integrated</b> 160 x 96 x 41					40-65/ 75 (1.57-2.56/ 2.95)	40-65/ 75 (1.57-2.56/ 2.95)	40-65/ 75 (1.57-2.56/ 2.95)
<b>Accessories</b>						Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)	Spacer (6GT2 690-0AK00)

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)












### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF300 Family Matrix (ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D126</b> 6GT2 600-0AE00 112 byte EEPROM   -40°C to 100°C Ø 50 x 3.6 IP68	<b>D426</b> 6GT2 600-4AH00 2 kbyte FRAM   -40°C to 100°C Ø 50 x 3.6 IP68	<b>D423</b> 6GT2 600-4AA00 2 kbyte FRAM   -40°C to 100°C Ø 30 x 8 IP68/ IPx9K	<b>D425</b> 6GT2 600-4AG00 2 kbyte FRAM   -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	<b>D428</b> 6GT2 600-4AK00-0AX0 2 kbyte FRAM   -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	<b>D139</b> 6GT2 600-0AA10 112 byte EEPROM   -40°C to 220°C Ø 85 x 15 IP68/IPx9K	<b>D339</b> 6GT2600-3AA10 992 byte EEPROM   -40°C to 220°C Ø 85 x 15 IP68/IPx9K
<b>RF310R</b> <b>RS422</b> 6GT2801-1BA10 6GT2801-1BA10-0AX1 (90° plate) 6GT2801-1BA10-0AX2 (Ex) 6GT2 801-1BA20-0AX1 (Scanmode)	<b>Integrated</b>  55 x 75 x 30	2-65/ 73 (0.08-2.56/ 2.87)	5-75/ 90 (0.2-2.95/ 3.54)	2-35/ 40 (0.08-1.37/ 1.57)	1-22/ 25 (0.04-0.87/ 0.98)	1-40/ 45 (0.08-1.57/ 1.77)	5-96/ 109 (0.20-3.78/ 4.29)	5-74/ 84 (0.20-2.91/ 3.31)
<b>RF340R</b> <b>RS422</b> 6GT2801-2BA10 6GT2801-2BA10-0AX2 (Ex)	<b>Integrated</b>  75 x 75 x 41	2-85/ 110 (0.08-3.34/ 4.33)	0-80/ 100 (0.0-3.15/ 3.94)	5-40/ 48 (0.2-1.57/ 1.89)	2-20/ 30 (0.08-0.79/ 1.18)	2-40/ 50 (0.08-1.57/ 1.97)	5-80/ 110 (0.20-3.15/ 4.33)	5-75/ 85 (0.20-2.95/ 3.35)
<b>RF350R ANT 1</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CB00 (ANT 1)	 75 x 75 x 20	2-90/ 120 (0.08-3.54/ 4.72)	2-85/ 95 (0.08-3.35/ 3.74)	2-40/ 50 (0.08-1.57/ 1.97)	2-23/ 32 (0.08-0.91/ 1.26)	2-40/ 50 (0.08-1.57/ 1.97)	5-85/ 115 (0.20-3.35/ 4.53)	5-90/ 105 (0.20-3.54/ 4.13)
<b>RF350R ANT 3</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD40-0AX0 (ANT 3)	 28 x 50 x 10			5-20/ 30 (0.2-0.79/ 1.18)	2-18/ 22 (0.08-0.71/ 0.87)	2-28/ 30 (0.08-1.10/ 1.18)		
<b>RF350R ANT 3S</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD60-0AX0 (ANT 3S)	 28 x 50 x 10							
<b>RF350R ANT 12</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CC00 (ANT 12)*	 Ø12 x 40					1-10/ 17 (0.04-0.39/ 0.67)		
<b>RF350R ANT 18</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CA00 (ANT 18)*	 Ø18 x 55				1-10/ 14 (0.04-0.39/ 0.55)	1-15/ 20 (0.04-0.59/ 0.79)		
<b>Accessories</b>		Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)	Mounting cover (6GT2 690-0AE00)			Spacer (6GT2 690-0AA00)  Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)	

**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**















Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF300 Family Matrix (ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D126</b> 6GT2 600-0AE00 112 byte EEPROM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D426</b> 6GT2 600-4AH00 2 kbyte FRAM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D423</b> 6GT2 600-4AA00 2 kbyte FRAM  -40°C to 100°C Ø 30 x 8 IP68/ IPx9K	<b>D425</b> 6GT2 600-4AG00 2 kbyte FRAM  -40°C to 125°C Ø 24 x 10 IP68/ IPx9K	<b>D428</b> 6GT2 600-4AK00-0AX0 2 kbyte FRAM  -40°C to 125°C Ø 24 x 20 IP68/ IPx9K	<b>D139</b> 6GT2 600-0AA10 112 byte EEPROM  -40°C to 220°C Ø 85 x 15 IP68/IPx9K	<b>D339</b> 6GT2600-3AA10 992 byte EEPROM  -40°C to 220°C Ø 85 x 15 IP68/IPx9K
<b>RF350R ANT 30</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD00 (ANT 30)* 	 Ø30 x 58	1-42/ 50 (0-1.65/ 1.97)	0-45/ 48 (0-1.77/ 1.89)	1-38/ 40 (0.04-1.50/ 1.57)	1-15/ 20 (0.04-0.59/ 0.79)	1-25/ 28 (0.04-0.98/ 1.10)		
<b>RF380R</b> <b>RS422, RS232</b> 6GT2801-3BA10 6GT2801-3BA10-0AX2 (Ex) 	<b>Integrated</b> 160 x 96 x 41	2-145/ 190 (0.08-5.71/ 7.48)	2-155/ 195 (0.0-6.1/ 7.68)	5-75/ 90 (0.2-2.95/ 3.54)	2-35/ 50 (0.08-1.38/ 1.97)	2-70/ 95 (0.08-2.76/ 3.74)	5-160/ 200 (0.20-6.30/ 7.87)	5-160/ 180 (0.20-6.30/ 7.09)
<b>RF382R</b> <b>RS422, RS232</b> 6GT2801-3AB20-0AX0 	<b>Integrated</b> 160 x 96 x 41							
<b>Accessories</b>		Spacer (6GT2 690-0AL00)	Spacer (6GT2 690-0AL00)	Mounting cover (6GT2 690-0AE00)			Spacer (6GT2 690-0AA00)  Mount for quick tag exchange (6GT2 690-0AH00 - long) (6GT2 690-0AH10 - short)	

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)











<b>RF300 Family Matrix (8 KB ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D521</b> 6GT2 600-5AE00 8 kByte FRAM    -40°C to 10°C Ø 10 x 4.5 IP67/IPx9K	<b>D522</b> 6GT2 600-5AF00 8 kByte FRAM    -40°C to 100°C Ø 20 x 6 IP68	<b>D524</b> 6GT2 600-5AC00 8 kByte FRAM    -40°C to 100°C Ø 27 x 4 IP67 / IPx9k	<b>D525</b> 6GT2 600-5AG00 8 kByte FRAM    -40°C to 125°C Ø 24 x 10 IP68 / IPx9k	<b>D526</b> 6GT2 600-5AH00 8 kByte FRAM    -40°C to 100°C Ø 50 x 3.6 IP68	<b>D528</b> 6GT2 600-5AK00 8 kByte FRAM    -40°C to 125°C Ø 24 x 20 IP68/IPx9K	<b>D560</b> 6GT2 600-5AB00 8 kByte FRAM    -40°C to 90°C Ø 16 x 3 IP68/IPx9K
<b>RF310R</b> <b>RS422</b> 6GT2801-1BA10 6GT2801-1BA10-0AX1 (90° plate) 6GT2801-1BA10-0AX2 (Ex)	 <b>Integrated</b> 55 x 75 x 30			1...70/78 (0.04-2.76/ 3.07)	1...22/25 (0.04-0.87/ 0.98)	5...80/90 (0.2-3.14/ 3.54)	1...43/48 (0.04-1.69/ 1.89)	1...32/38 (0.04-1.26/ 1.5)
<b>RF340R</b> <b>RS422</b> 6GT2801-2BA10 6GT2801-2BA10-0AX2 (Ex)	 <b>Integrated</b> 75 x 75 x 41			2...55/70 (0.08-2.16/ 2.76)	2...20/30 (0.08-0.79/ 1.18)	0...80/100 (0-3.15/ 3.94)	2...40/50 (0.08-1.57/ 1.97)	2...25/40 (0.08-0.98/ 1.57)
<b>RF350R ANT 1</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CB00 (ANT 1)	 75 x 75 x 20			2...65/85 (0.08-2.56/ 3.35)	2...25/35 (0.08-0.98/ 1.38)	0...85/105 (0-3.35/ 4.13)	2...35/50 (0.08-1.38/ 1.97)	2...32/38 (0.08-1.26/ 1.5)
<b>RF350R ANT 3</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD40-0AX0 (ANT 3)	 28 x 50 x 10		1...19/22 (0.04-0.75/ 0.87)	5...52/56 (0.2-2.05/ 2.20)	2...21/24 (0.08-0.83/ 0.94)		2...24/26 (0.08-0.94/ 1.02)	1...20/28 (0.04-0.79/ 1.1)
<b>RF350R ANT 3S</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD60-0AX0 (ANT 3S)	 28 x 50 x 10							
<b>RF350R ANT 12</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CC00 (ANT 12)*	 Ø12 x 40						1...16/17 (0.04-0.63/ 0.67)	1...8/10 (0.04-0.31/ 0.39)
<b>RF350R ANT 18</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CA00 (ANT 18)*	 Ø18 x 55			1...10/13 (0.04-0.39/ 0.51)	1...27/35 (0.04-1.06/ 1.38)	1...10/14 (0.04-0.39/ 0.55)	1...15/20 (0.04-0.59/ 0.79)	1...12/16 (0.04-0.47/ 0.63)
<b>Accessories</b>				Spacer (6GT2 690-0AK00)		Spacer (6GT2 690-0AL00)		Spacer (6GT2 690-0AG00)  Angle pattern body (6GT2690-0AN00)

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)



















<b>RF300 Family Matrix (8 KB ISO Tags)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>D521</b> 6GT2 600-5AE00 8 kByte FRAM    -40°C to 10°C Ø 10 x 4.5 IP67/IPx9K	<b>D522</b> 6GT2 600-5AF00 8 kByte FRAM    -40°C to 100°C Ø 20 x 6 IP68	<b>D524</b> 6GT2 600-5AC00 8 kByte FRAM    -40°C to 100°C Ø 27 x 4 IP67 / IPx9k	<b>D525</b> 6GT2 600-5AG00 8 kByte FRAM    -40°C to 125°C Ø 24 x 10 IP68 / IPx9k	<b>D526</b> 6GT2 600-5AH00 8 kByte FRAM    -40°C to 100°C Ø 50 x 3.6 IP68	<b>D528</b> 6GT2 600-5AK00 8 kByte FRAM    -40°C to 125°C Ø 24 x 20 IP68/IPx9K	<b>D560</b> 6GT2 600-5AB00 8 kByte FRAM    -40°C to 90°C Ø 16 x 3 IP68/IPx9K
<b>RF350R ANT 30</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD00 (ANT 30)*  	 Ø30 x 58		1-19/ 22 (0.04-0.75/ 0.87)	0-45/ 50 (0-1.77/ 1.97)	1-15/ 20 (0.04-0.59/ 0.79)	0-45/ 48 (0-1.77/ 1.89)	1-25/ 28 (0.04-0.98/ 1.10)	1-18/ 20 (0.04-0.71/ 0.79)
<b>RF380R</b> <b>RS422, RS232</b> 6GT2801-3BA10 6GT2801-3BA10-0AX2 (Ex)  	<b>Integrated</b>			2-120/ 140 (0.08-4.72/ 5.51)	2-35/ 50 (0.08-1.38/ 1.97)	2-155/ 195 (0.08-6.10/ 7.68)	2-70/ 95 (0.08-2.76/ 3.74)	2-65/ 90 (0.08-2.56/ 3.54)
<b>Accessories</b>				Spacer (6GT2 690-0AK00)		Spacer (6GT2 690-0AL00)		Spacer (6GT2 690-0AG00)  Angle pattern body (6GT2690-0AN00)

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**








Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

<b>RF300 Family Matrix (MOBY E compatibility)</b>  13.56 MHz Passive Tags  Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>E600</b> 6GT2 300-0AA00 752 byte EEPROM    -25°C to 60°C 86 x 54 x 0.76 IP68	<b>E611</b> 6GT2 300-0BB00 752 byte EEPROM    -40°C to 85°C 86 x 54 x 2.5 IP67	<b>E623</b> 6GT2 300-0CD00 752 byte EEPROM    -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>E624</b> 6GT2 300-0CE00 752 byte EEPROM    -40°C to 150°C Ø 27 x 4 IP67/ IPx9K
<b>RF310R</b> <b>RS422</b> 6GT2801-1BA10 6GT2801-1BA10-0AX1 (90° plate) 6GT2801-1BA10-0AX2 (Ex) 	<b>Integrated</b> 55 x 75 x 30	2-30/ 43 (0.08-1.18/ 1.69)	2-40/ 60 (0.08-1.57/ 2.36)		2-35/ 36 (0.08-1.37/ 1.42)
<b>RF340R</b> <b>RS422</b> 6GT2801-2BA10 6GT2801-2BA10-0AX2 (Ex) 	<b>Integrated</b> 75 x 75 x 41	5-50/ 65 (0.2-1.97/ 2.56)	10-50/ 65 (0.39-1.97/ 2.56)		2-35/ 45 (0.08-1.37/ 1.77)
<b>RF350R ANT 1</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CB00 (ANT 1) 	 75 x 75 x 20	10-50/ 60 (0.39-1.97/ 2.36)	20-50/ 65 (0.79-1.97/ 2.56)		2-35/ 45 (0.08-1.37/ 1.77)
<b>RF350R ANT 3</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD40-0AX0 (ANT 3) 	 28 x 50 x 10				1-15/ 16 (0.04-0.59/ 0.63)
<b>RF350R ANT 3S</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD60-0AX0 (ANT 3S) 	 28 x 50 x 10				
<b>RF350R ANT 12</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CC00 (ANT 12)* 	 Ø12 x 40			0-4/ 5 (0-0.16/ 0.20)	
<b>RF350R ANT 18</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CA00 (ANT 18)* 	 Ø18 x 55			0-6/ 8 (0-0.24/ 0.31)	2-15/ 20 (0.08-0.59/ 0.79)
<b>Accessories</b>		Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)		Spacer (6GT2 690-0AK00)

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

### Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

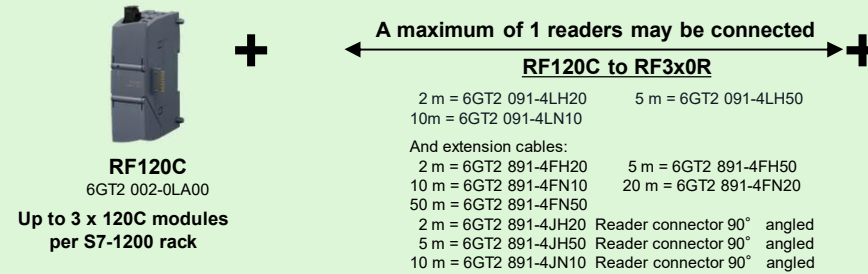
<b>RF300 Family Matrix (MOBY E compatibility)</b>  13.56 MHz Passive Tags Operational Temperature Range Dimensions(L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>E600</b> 6GT2 300-0AA00 752 byte EEPROM  -25°C to 60°C 86 x 54 x 0.76 IP68	<b>E611</b> 6GT2 300-0BB00 752 byte EEPROM  -40°C to 85°C 86 x 54 x 2.5 IP67	<b>E623</b> 6GT2 300-0CD00 752 byte EEPROM  -40°C to 100°C Ø10 x 4.5 IP67/ IPx9K	<b>E624</b> 6GT2 300-0CE00 752 byte EEPROM  -40°C to 150°C Ø 27 x 4 IP67/ IPx9K
<b>RF350R ANT 30</b> <b>RS422</b> 6GT2801-4BA10 6GT2801-4BA10-0AX2 (Ex) 6GT2 398-1CD00 (ANT 30)* 	 Ø30 x 58				1-20/ 24 (0.04-0.79/ 0.94)
<b>RF380R</b> <b>RS422, RS232</b> 6GT2801-3BA10 6GT2801-3BA10-0AX2 (Ex) 	<b>Integrated</b>	10-80/ 95 (0.39-3.15/ 3.74)	10-115/ 135 (0.39-4.53/ 5.31)		5-50/ 60 (0.20-1.97/ 2.36)
<b>Accessories</b>		Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Holder (6GT2 390-0AA00) 20 mm spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)		Spacer (6GT2 690-0AK00)

\*antennas also available in stainless steel: ANT12 (6GT2398-1DC10), ANT18 (6GT2398-1DA10), ANT30 (6GT2398-1DD10)

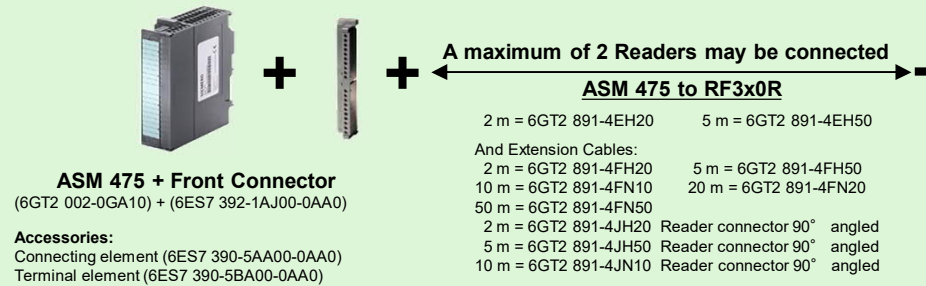
**Operating Distance Range (mm) / Maximum Distance for Stationary Tag (mm)**

Operating Distance Range (inch) / Maximum Distance for Stationary Tag (inch)

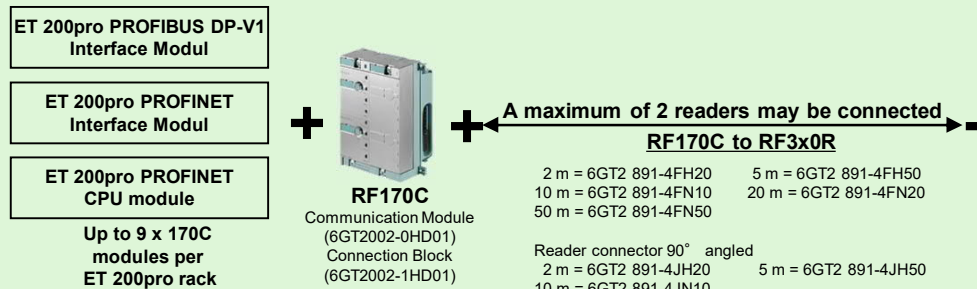
## SIMATIC PLC S7-1200



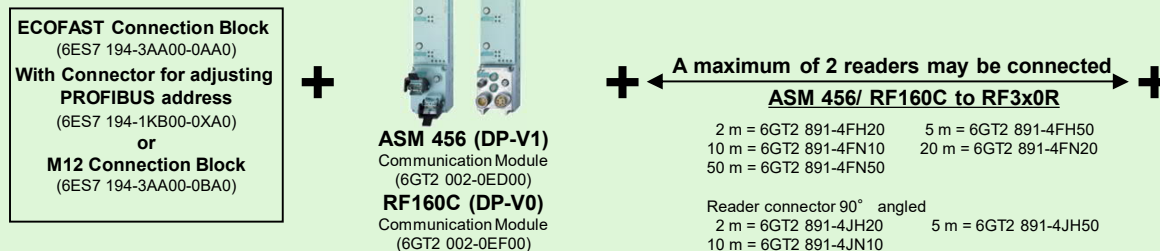
## SIMATIC PLC S7-300 Rack or S7-400 via ET 200M (DP-V1/PN-IO)



## ET 200pro via PROFIBUS or PROFINET or S7 PLC



## PROFIBUS



## Reader powered through connection cable



**RF310R RS422**  
6GT2 801-1BA10  
6GT2801-1BA10-0AX1 (90° plate)  
6GT2801-1BA10-0AX2 (Ex)



**RF340R**  
6GT2 801-2BA10  
6GT2801-2BA10-0AX2 (Ex)



**RF350R**  
6GT2 801-4BA10,  
/4BA10-0AX2 (Ex)



**RF380R**  
6GT2 801-3BA10  
6GT2801-3BA10-0AX2 (Ex)

- ANT 1**  
(6GT2 398-1CB00)
- ANT 3**  
(6GT2 398-1CD40-0AX0)
- ANT 3S**  
(6GT2 398-1CD60-0AX0)
- ANT 12**  
(6GT2 398-1CC00)  
(6GT2398-1DC10 steel)
- ANT 18**  
(6GT2 398-1CA00)  
(6GT2398-1DA10 steel)
- ANT 30**  
(6GT2 398-1CD00)  
(6GT2398-1DD10 steel)

## Tags



**RF320T**  
(6GT2 800-1CA00)



**RF330T**  
(6GT2 800-5BA00)



**RF340T**  
(8 kb: 6GT2 800-4BB00)  
(32 kb: 6GT2 800-5BB00)



**RF350T**  
(6GT2 800-5BD00)



**RF360T**  
(8 kb: 6GT2 800-4AC00)  
(32 kb: 6GT2 800-5AC00)



**RF370T**  
(32 kb: 6GT2 800-5BE00)  
(64 kb: 6GT2 800-6BE00)



**RF380T**  
(6GT2 800-5DA00)

## ISO TAGS

- D100** 6GT2 600-0AD10
- D200** 6GT2 600-1AD00-0AX0
- D400** 6GT2 600-4AD00
- D117** 6GT2 600-0AG00
- D421** 6GT2 600-4AE00
- D422** 6GT2 600-4AF00
- D423** 6GT2 600-4AA00
- D124** 6GT2 600-0AC10
- D324** 6GT2 600-3AC00
- D424** 6GT2 600-4AC00
- D425** 6GT2 600-4AG00
- D126** 6GT2 600-0AE00
- D426** 6GT2 600-4AH00
- D127** 6GT2 600-0AF00
- D428** 6GT2 600-4AK00-0AX0
- D139** 6GT2 600-0AA10
- D339** 6GT2 600-3AA10
- D160** 6GT2 600-0AB10
- D460** 6GT2 600-4AB00
- D560** 6GT2600-5AB00
- D261** 6GT2 600-1AA01-0AX0
- D165** 6GT2 600-1AB00-0AX0

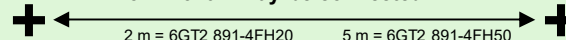
# RF300 System Interfaces

## PROFINET & OPC UA

### Communication Modules



A maximum of  
**1 reader at RF185C,**  
**2 readers at RF186C/CI,**  
**4 readers at RF188C/CI**  
**of RF3x0R may be connected**

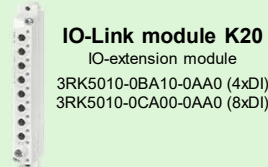


2 m = 6GT2 891-4FH20    5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10    20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

### Additional IOs



**RF18xCI to sensor**  
 1.5 m = 3RK1902-4PB15-3AA0  
 5 m = 6GT2 891-4MH50  
 10 m = 6GT2 891-4MN10



Or one  
**Standard sensor**

Or one  
**Actor**

Reader connector 90° angled:  
 2 m = 6GT2 891-4JH20    5 m = 6GT2 891-4JH50  
 10 m = 6GT2 891-4JN10

## Ethernet TCP/IP



Computers and  
 non Siemens PLCs

Ethernet TP cable  
 through switch. See  
 Page 75 for RF182C  
 Cabling/ Connectors



**RF182C**  
 Communication Module  
 (6GT2 002-0JD10)

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 Push Pull RJ45 (6GT2 002-2JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

A maximum of 2 readers may be connected  
**RF182C to RF3X0R**

2 m = 6GT2 891-4FH20    5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10    20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

Reader connector 90° angled  
 2 m = 6GT2 891-4JH20    5 m = 6GT2 891-4JH50  
 10 m = 6GT2 891-4JN10

## Ethernet/IP

**RFID 181EIP**  
 Communication Module  
 (6GT2 002-0JD20)



**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

A maximum of 2 readers may be connected  
**RFID 181EIP to RF3x0R**

2 m = 6GT2 891-4FH20    5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10    20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

Reader connector 90° angled  
 2 m = 6GT2 891-4JH20    5 m = 6GT2 891-4JH50  
 10 m = 6GT2 891-4JN10

### Reader

powered through connection cable

**RF310R RS422**  
 6GT2 801-1BA10  
 6GT2801-1BA10-0AX1 (90° plate)  
 6GT2801-1BA10-0AX2 (Ex)

**RF340R**  
 6GT2 801-2BA10  
 6GT2801-2BA10-0AX2 (Ex)

**RF350R**  
 6GT2 801-4BA10  
 /-4BA10-0AX2 (Ex)

**RF380R**  
 6GT2 801-3BA10  
 6GT2801-3BA10-0AX2 (Ex)

**ANT 1**  
 (6GT2 398-1CB00)

**ANT 3**  
 (6GT2 398-1CD40-0AX0)

**ANT 3S**  
 (6GT2 398-1CD60-0AX0)

**ANT 12**  
 (6GT2 398-1CC00)  
 (6GT2398-1DC10 steel)

**ANT 18**  
 (6GT2 398-1CA00)  
 (6GT2398-1DA10 steel)

**ANT 30**  
 (6GT2 398-1CD00)  
 (6GT2398-1DD10 steel)

### Tags

**RF320T**  
 (6GT2 800-1CA00)

**RF330T**  
 (6GT2 800-5BA00)

**RF340T**  
 (8 kb: 6GT2 800-4BB00)  
 (32 kb: 6GT2 800-5BB00)

**RF350T**  
 (6GT2 800-5BD00)

**RF360T**  
 (8 kb: 6GT2 800-4AC00)  
 (32 kb: 6GT2 800-5AC00)

**RF370T**  
 (32 kb: 6GT2 800-5BE00)  
 (64 kb: 6GT2 800-6BE00)

**RF380T**  
 (6GT2 800-5DA00)

### ISO TAGS

**D100** 6GT2 600-0AD10  
**D200** 6GT2 600-1AD00-0AX0  
**D400** 6GT2 600-4AD00  
**D117** 6GT2 600-0AG00  
**D421** 6GT2 600-4AE00  
**D422** 6GT2 600-4AF00  
**D423** 6GT2 600-4AA00  
**D124** 6GT2 600-0AC10  
**D324** 6GT2 600-3AC00  
**D424** 6GT2 600-4AC00  
**D425** 6GT2 600-4AG00  
**D126** 6GT2 600-0AE00  
**D426** 6GT2 600-4AH00  
**D127** 6GT2 600-0AF00  
**D428** 6GT2 600-4AK00-0AX0  
**D139** 6GT2 600-0AA10  
**D339** 6GT2 600-3AA10  
**D160** 6GT2 600-0AB10  
**D460** 6GT2 600-4AB00  
**D560** 6GT2600-5AB00  
**D261** 6GT2 600-1AA01-0AX0  
**D165** 6GT2 600-1AB00-0AX0

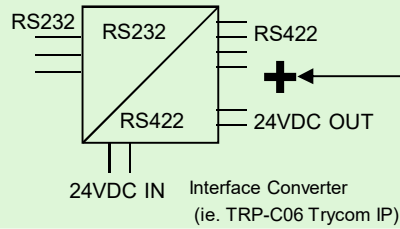
# RF300 System Interfaces



## RS232/RS422



No Driver needed  
Scanmode; Read only



1 Reader per COM port may be connected

**Open Wire to RF310R Scanmode**  
2 m = 6GT2 891-4EH20  
5 m = 6GT2 891-4EH50

## Reader

with external power supply



**RF310R Scanmode**  
(6GT2 801-1BA20-0AX1)

## Tags

**RF320T**  
(6GT2 800-1CA00)

**RF330T**  
(6GT2 800-5BA00)

**RF340T**  
(8 kb: 6GT2 800-4BB00)  
(32 kb: 6GT2 800-5BB00)

**RF350T**  
(6GT2 800-5BD00)

**RF360T**  
(8 kb: 6GT2 800-4AC00)  
(32 kb: 6GT2 800-5AC00)

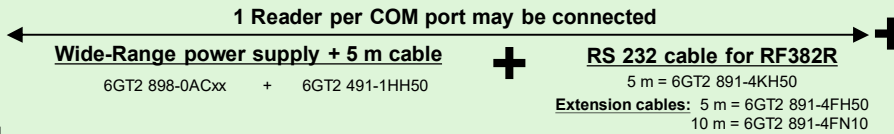
**RF370T**  
(32 kb: 6GT2 800-5BE00)  
(64 kb: 6GT2 800-6BE00)

**RF380T**  
(6GT2 800-5DA00)

## RS232



No Driver needed  
Scanmode; Read only



## Reader

with external power supply at Y-cable

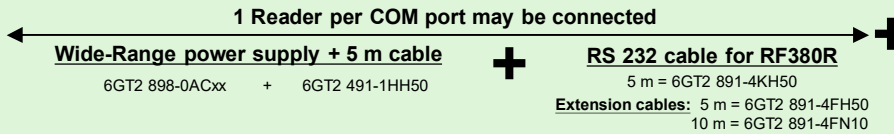


**RF382R**  
(6GT2 801-3AB20-0AX0)

## RS232



MOBY API serial on DVD



## Reader

with external power supply at Y-cable














**RF380R**  
6GT2 801-3BA10  
6GT2801-3BA10-0AX2 (Ex)

## ISO TAGS

- D100 6GT2 600-0AD10
- D200 6GT2 600-1AD00-0AX0
- D400 6GT2 600-4AD00
- D117 6GT2 600-0AG00
- D421 6GT2 600-4AE00
- D422 6GT2 600-4AF00
- D423 6GT2 600-4AA00
- D124 6GT2 600-0AC10
- D324 6GT2 600-3AC00
- D424 6GT2 600-4AC00
- D425 6GT2 600-4AG00
- D126 6GT2 600-0AE00
- D426 6GT2 600-4AH00
- D127 6GT2 600-0AF00
- D428 6GT2 600-4AK00-0AX0
- D139 6GT2 600-0AA10
- D339 6GT2 600-3AA10
- D160 6GT2 600-0AB10
- D460 6GT2 600-4AB00
- D560 6GT2600-5AB00
- D261 6GT2 600-1AA01-0AX0
- D165 6GT2 600-1AB00-0AX0




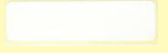

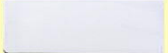
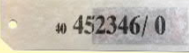







<b>RF600 Family Matrix Labels</b> 865-868 MHz (ETSI) 902-928 MHz (FCC) Passive Tags (with Gen2 protocol)  Operational Temperature Range Dimensions (L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>RF630L</b> 6GT2 810-2AB02-0AX0 96/240 bits EPC, 64 byte    -40°C to 80°C 97 x 27 IP65	<b>RF630L</b> 6GT2 810-2AB03 96/240 bits EPC, 64 byte    -40°C to 80°C 54 x 34 IP65	<b>RF630L</b> 6GT2 810-2AB04 256 bits EPC, 64 byte    -20°C to 160°C 74 x 27 IP60	<b>RF630L</b> 6GT2 810-2AC82 128 bits EPC    -25°C to 90°C 45 x 20 IP67	<b>RF630L</b> 6GT2 810-2AC84 448 bits EPC, 256 byte    -40°C to 85°C 73 x 12,5 IP67
<b>RF615R (IP67)</b> (internal antenna used) 6GT2811-6CC10-0AA0 (ETSI) 6GT2811-6CC10-1AA0 (FCC) 6GT2811-6CC10-2AA0 (CMIIT)  <b>RF610R (IP67)</b> (internal antenna used) 6GT2811-6BC10-0AA0 (ETSI) 6GT2811-6BC10-1AA0 (FCC) 6GT2811-6BC10-2AA0 (CMIIT)	<b>Integrated</b> 133 x 133 x 45	1.0 (39)	0.6 (24)	0.6 (24)	0.4 (16)	0.5 (20)
<b>RF615R (IP67)</b> (external antenna used) 6GT2811-6CC10-0AA0 (ETSI) 6GT2811-6CC10-1AA0 (FCC) 6GT2811-6CC10-2AA0 (CMIIT)  Antennas: 6GT2 812-0EA00 RF615A, linear, (ETSI) 6GT2 812-0EA01 RF615A, linear, (FCC, CMIIT) 6GT2 812-1EA00, RF620A, linear, (ETSI) 6GT2 812-1EA01, RF620A, linear, (FCC, CMIIT) 6GT2 812-1GA08, RF642A, linear, (all readers) 6GT2 812-0GB08 RF650A, circular, (all readers) 6GT2 812-0AA00, RF660A, circular, (ETSI) 6GT2 812-0AA01, RF660A, circular, (FCC, CMIIT) 6GT2 812-2GB08 RF680A, switchable (all readers)	RF615A  52 x 52 x 16  RF620A  75 x 75 x 20  RF642A**  185 x 185 x 45  RF650A**  198 x 198 x 60  RF660A**  313 x 313 x 80  RF680A**  198 x 198 x 60	0.5 (20)	0.2 (8)	0.2 (8)	0.1 (4)	0.2 (8)
		0.6 (24)	0.2 (8)	0.2 (8)	0.2 (8)	0.2 (8)
		4.0 (157)	1.6 (63)	1.8 (71)	3.0 (118)	3.0 (118)
		2.0 (79)	0.9 (35)	0.8 (31)	1.4 (55)	1.6 (63)
		4.0 (157)	1.4 (55)	1.6 (63)	2.5 (98)	1.6 (63)
		2.0 (79)	1.0 (39)	1.0 (39)	1.4 (55)	3.0 (118)
<b>Accessories</b>	**Antenna mounting kit (6GT2 890-2AB10)					

Maximum operating distance (m) and maximum operating distance (inch)















pay attention to the system manual for range overshoot

SIMATIC Ident Configuration Guide



<b>RF600 Family Matrix Labels</b> 865-868 MHz (ETSI) 902-928 MHz (FCC) Passive Tags (with Gen2 protocol)  Operational Temperature Range Dimensions (L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>RF630L</b> 6GT2810-2AE81-0AX1 128 bits EPC    -40°C to 160°C 90 x 30 IP67	<b>RF630L</b> 6GT2810-2AE81-0AX3 448 bit EPC, 256 Byte    -40°C to 120°C 75 x 20 IP67	<b>RF630L</b> 6GT2810-2AE80-0AX2 Up to 480 bits EPC, 64/8 Byte    -25°C to 85°C 105 x 25 IP67	<b>RF642L</b> 6GT2810-3AC00 (ETSI) 6GT2810-3AC10 (FCC) 448 bit EPC, 256 byte    -25°C to 85°C 50 x 22.5 x 1.6 IP68	<b>RF682L</b> 6GT2810-2AG84-0AX0 448 bits EPC, 256 Byte    -40°C to 230°C 156 x 40 IP67	<b>RF690L</b> 6GT2810-2AG00 (ETSI) 6GT2810-2AG10 (FCC) 96/480 bit EPC, 64 byte    -25°C to 160°C 88 x 25 x 1.6 75 x 25 x 1.6 IP67
<b>RF615R (IP67)</b> (internal antenna used) 6GT2811-6CC10-0AA0 (ETSI) 6GT2811-6CC10-1AA0 (FCC) 6GT2811-6CC10-2AA0 (CMIIT)  <b>RF610R (IP67)</b> (internal antenna used) 6GT2811-6BC10-0AA0 (ETSI) 6GT2811-6BC10-1AA0 (FCC) 6GT2811-6BC10-2AA0 (CMIIT)	<b>Integrated</b> 133 x 133 x 45	0.6 (24)	0.5 (20)	1.0 (39)	0.8 (31)	1.0 (39)	0.2 (8)
<b>RF615R (IP67)</b> (external antenna used) 6GT2811-6CC10-0AA0 (ETSI) 6GT2811-6CC10-1AA0 (FCC) 6GT2811-6CC10-2AA0 (CMIIT)  Antennas: 6GT2 812-0EA00 RF615A, linear, (ETSI) 6GT2 812-0EA01 RF615A, linear, (FCC, CMIIT) 6GT2 812-1EA00, RF620A, linear, (ETSI) 6GT2 812-1EA01, RF620A, linear, (FCC, CMIIT) 6GT2 812-1GA08, RF642A, linear, (all readers) 6GT2 812-0GB08 RF650A, circular, (all readers) 6GT2 812-0AA00, RF660A, circular, (ETSI) 6GT2 812-0AA01, RF660A, circular, (FCC, CMIIT) 6GT2 812-2GB08 RF680A, switchable (all readers)	RF615A  52 x 52 x 16  RF620A  75 x 75 x 20  RF642A**  185 x 185 x 45  RF650A**  198 x 198 x 60  RF660A**  313 x 313 x 80  RF680A**  198 x 198 x 60	0.2 (8)	0.2 (8)	0.5 (28)	0.2 (8)	0.7 (28)	0.1 (4)
		0.2 (8)	0.2 (8)	0.5 (20)	0.4 (16)	0.9 (35)	0.1 (4)
		2.5 (98)	3.0 (118)	4.0 (157)	2.0 (79)	4.5 (177)	0.3 (12)
		1.0 (39)	1.6 (63)	2.5 (98)	0.8 (31)	2.5 (98)	0.1 (4)
		3.5 (138)	3.0 (118)	4.0 (157)	1.8 (71)	4.5 (177)	0.3 (12)
		1.2 (47)	1.6 (63)	2.5 (98)	1.0 (39)	2.5 (98)	0.1 (4)
<b>Accessories</b>	**Antenna mounting kit (6GT2 890-2AB10)						











Maximum operating distance (m) and maximum operating distance (inch)  
 pay attention to the system manual for range overshoot

<b>RF600 Family Matrix Industrial Tags</b> 865-868 MHz (ETSI) 902-928 MHz (FCC) Passive Tags (with Gen2 protocol)  Operational Temperature Range Dimensions (L x W x D) mm Ingress Protection (IP) Rating		Antennas	RF610T	RF620T	RF625T	RF630T	RF640T	RF645T	RF680T	RF682T
			6GT2 810-2BB80 6GT2 810-2BB80-0AX1* 96/240 bit EPC, 64 byte 	6GT2 810-2HC81 96/128 bit EPC, 64 byte 	6GT2 810-2EE00 (ETSI) 6GT2 810-2EE01 (FCC) 96/128 bit EPC, 64 byte 	6GT2 810-2EC00 (ETSI) 6GT2 810-2EC10 (FCC) 96/240 bit EPC, 64 byte 	6GT2 810-2DC00 (ETSI) 6GT2 810-2DC10 (FCC) 96/240 bit EPC, 64 byte 	6GT2 810-2HC05 448 bit EPC, 256 byte 	6GT2 810-2HG80 96/240 bit EPC, 64 byte 	6GT2810-3HG80 256 bit EPC, 384 byte 
			-40°C to 85°C 86 x 54 x 0.4 IP67	-40°C to 85°C 127 x 38 x 6 IP67	-40°C to 125°C Ø 30 x 8 IP68/ IPx9K	-40°C to 125°C Ø 21x 20 IP68/ IPx9K	-40°C to 125°C Ø 50 x 8 IP68/ IPx9K	-40°C to 85°C 52 x 36 x 12,5 IP68	-40°C to 220°C 130 x 32 x 15 IP68/ IPx9K	-40°C to 220°C 130 x 32 x 15 IP68/ IPx9K
<b>RF615R (IP67)</b> (internal antenna used) 6GT2811-6CC10-0AA0 (ETSI) 6GT2811-6CC10-1AA0 (FCC) 6GT2811-6CC10-2AA0 (CMIIT)  <b>RF610R (IP67)</b> (internal antenna used) 6GT2811-6BC10-0AA0 (ETSI) 6GT2811-6BC10-1AA0 (FCC) 6GT2811-6BC10-2AA0 (CMIIT)		<b>Integrated</b> 133 x 133 x 45	0.8 (31)	1.0 (39)	0.3 (12)	0.3 (12)	0.4 (16)	1.0 (39)	1.0 (39)	1.0 (39)
<b>RF615R (IP67)</b> (external antenna used) 6GT2811-6CC10-0AA0 (ETSI) 6GT2811-6CC10-1AA0 (FCC) 6GT2811-6CC10-2AA0 (CMIIT)		RF615A  52 x 52 x 16	0.3 (12)	1.0 (39)	0.1 (4)	0.1 (4)	0.2 (8)	0.7 (28)	0.6 (24)	0.4 (16)
		RF620A  75 x 75 x 20	0.4 (16)	1.2 (47)	0.1 (4)	0.2 (8)	0.2 (8)	0.9 (35)	0.7 (28)	0.4 (16)
		RF642A**  185 x 185 x 45	3.0 (118)	4.0 (157)	1.0 (39)	0.5 (20)	1.4 (55)	3.0 (118)	4.0 (157)	2.5 (98)
		RF650A**  198 x 198 x 60	1.2 (47)	3.5 (138)	0.2 (8)	0.4 (16)	0.7 (28)	1.6 (63)	1.8 (71)	1.2 (47)
		RF660A**  313 x 313 x 80	3.0 (118)	4.0 (157)	0.8 (31)	1.0 (39)	1.2 (47)	3.5 (138)	4.0 (157)	2.0 (79)
		RF680A**  198 x 198 x 60	1.4 (55)	4.0 (157)	0.2 (8)	0.5 (20)	1.2 (47)	1.8 (71)	2.0 (79)	1.2 (47)
<b>Accessories</b>		**Antenna mounting kit (6GT2 890-2AB10)	20 mm Spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Spacer (6GT2 898-2AA00)				Mounting cover 6GT2898-5AA00 Retaining bracket 6GT2898-5AB00	Retaining bracket 6GT2890-2AA00	Retaining bracket 6GT2890-2AA00

Maximum operating distance (m) and maximum operating distance (inch)

pay attention to the system manual for range overshoot


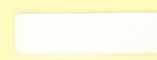

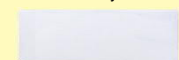
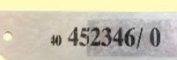










SIMATIC Ident Configuration Guide

<b>RF600 Family Matrix Labels</b> 865-868 MHz (ETSI) 902-928 MHz (FCC) Passive Tags (with Gen2 protocol)  Operational Temperature Range Dimensions ( L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>RF630L</b> 6GT2 810-2AB02-0AX0 96/240 bits EPC, 64 byte    -40°C to 80°C 97 x 27 IP65	<b>RF630L</b> 6GT2 810-2AB03 96/240 bits EPC, 64 byte    -40°C to 80°C 54 x 34 IP65	<b>RF630L</b> 6GT2 810-2AB04 256 bits EPC, 64 byte    -20°C to 160°C 74 x 27 IP60	<b>RF630L</b> 6GT2810-2AC82 128 bits EPC    -25°C to 90°C 45 x 20 IP67	<b>RF630L</b> 6GT2 810-2AC84 448 bits EPC, 256 byte    -40°C to 85°C 73 x 12,5 IP67
<b>RF685R (IP65)</b> (internal antenna used) 6GT2811-6CA10-0AA0 (ETSI) 6GT2811-6CA10-1AA0 (FCC) 6GT2811-6CA10-2AA0 (CMIIT) 6GT2811-6CA10-4AA0 (ARIB)	<b>Integrated</b> 260 x 193 x 52	7.0 (276)	3.0 (118)	3.5 (138)	5.0 (197)	5.0 (197)
<b>RF685R (IP65)</b> (external antenna used) 6GT2811-6CA10-0AA0 (ETSI) 6GT2811-6CA10-1AA0 (FCC) 6GT2811-6CA10-2AA0 (CMIIT) 6GT2811-6CA10-4AA0 (ARIB)	RF615A  52 x 52 x 16	2.2 (87)	0.7 / *0.5 (28 / *20)	0.8 / *0.6 (31 / *24)	1.0 / *0.7 (39 / *28)	1.4 / *1.0 (55 / *39)
<b>RF680R (IP65)</b> 6GT2811-6AA10-0AA0 (ETSI) 6GT2811-6AA10-1AA0 (FCC) 6GT2811-6AA10-2AA0 (CMIIT) 6GT2811-6AA10-4AA0 (ARIB)	RF620A  75 x 75 x 20	2,3 (91)	0.8 / *0.5 (31 / *20)	0.9 / *0.7 (35 / *28)	1.2 / *0.8 (47 / *31)	1.4 / *1.0 (55 / *39)
<b>RF650R (IP30)</b> 6GT2811-6AB20-0AA0 (ETSI) 6GT2811-6AB20-1AA0 (FCC) 6GT2811-6AB20-2AA0 (CMIIT) 6GT2811-6AB20-4AA0 (ARIB)	RF642A**  185 x 185 x 45	6.8 (268)	3.0 (118)	3.5 (138)	5.0 / *4.5 (197 / *177)	5.0 (197)
<b>RF650R (IP30)</b> 6GT2811-6AB20-0AA0 (ETSI) 6GT2811-6AB20-1AA0 (FCC) 6GT2811-6AB20-2AA0 (CMIIT) 6GT2811-6AB20-4AA0 (ARIB)	RF650A**  198 x 198 x 60	4.8 (189)	1.8 / *1.4 (71 / *55)	2.5 / *1.8 (98 / *71)	3.0 / *2.0 (118 / *79)	3.5 / *2.5 (138 / *98)
<b>Antennas:</b> 6GT2 812-0EA00 RF615A, linear, (ETSI) 6GT2 812-0EA01 RF615A, linear, (FCC, CMIIT, ARIB) 6GT2 812-1EA00, RF620A, linear, (ETSI) 6GT2 812-1EA01, RF620A, linear, (FCC, CMIIT, ARIB) 6GT2 812-1GA08, RF642A, linear, (all readers) 6GT2 812-0GB08 RF650A, circular, (all readers) 6GT2 812-0AA00, RF660A, circular, (ETSI) 6GT2 812-0AA01, RF660A, circular, (FCC, CMIIT, ARIB) 6GT2 812-2GB08 RF680A, switchable (all readers)	RF660A**  313 x 313 x 80	5.7 (224)	2.5 (98)	3.0 (118)	4.0 (157)	4.0 (157)
<b>Accessories</b>	**Antenna mounting kit (6GT2 890-2AB10)					

Maximum operating distance (m) and maximum operating distance (inch)

\* Use this value in combination with RF650R


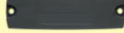





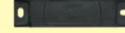







pay attention to the system manual for range overshoot

<b>RF600 Family Matrix Labels</b> 865-868 MHz (ETSI) 902-928 MHz (FCC) Passive Tags (with Gen2 protocol)  Operational Temperature Range Dimensions (L x W x D) mm Ingress Protection (IP) Rating	<b>Antennas</b>	<b>RF630L</b> 6GT2810-2AE81-0AX1 128 bits EPC    -40°C to 160°C 90 x 30 IP67	<b>RF630L</b> 6GT2810-2AE81-0AX3 448 bit EPC, 256 Byte    -40°C to 120°C 75 x 20 IP67	<b>RF630L</b> 6GT2810-2AE80-0AX2 Up to 480 bits EPC, 64/8 byte    -25°C to 85°C 105 x 25 IP67	<b>RF642L</b> 6GT2810-3AC00 (ETSI) 6GT2810-3AC10 (FCC) 448 bit EPC, 256 byte    -25°C to 85°C 50 x 22.5 x 1.6 IP68	<b>RF682L</b> 6GT2810-2AG84-0AX0 448 bits EPC, 256 Byte    -40°C to 230°C 156 x 40 IP67	<b>RF690L</b> 6GT2810-2AG00 (ETSI) 6GT2810-2AG10 (FCC) 96/496 bit EPC, 64 byte    -25°C to 160°C 88 x 25 x 1.6 75 x 25 x 1.6 IP67
<b>RF685R (IP65)</b> (internal antenna used)  6GT2811-6CA10-0AA0 (ETSI) 6GT2811-6CA10-1AA0 (FCC) 6GT2811-6CA10-2AA0 (CMIIT) 6GT2811-6CA10-4AA0 (ARIB)	<b>Integrated</b> 260 x 193 x 52	3.5 (138)	5.0 (197)	6.0 (236)	2.0 (79)	6.0 (236)	3.0 (118)
<b>RF685R (IP65)</b> (external antenna used)  6GT2811-6CA10-0AA0 (ETSI) 6GT2811-6CA10-1AA0 (FCC) 6GT2811-6CA10-2AA0 (CMIIT) 6GT2811-6CA10-4AA0 (ARIB)	RF615A  52 x 52 x 16	0.8 / *0.6 (31 / *24)	1.4 / *1.0 (55 / *39)	1.8 / *1.4 (71 / *55)	0.5 / *0.4 (20 / *16)	1.6 / *1.2 (63 / *47)	0.2 / *0.2 (8 / *8)
	RF620A  75 x 75 x 20	0.9 / *0.6 (35 / *24)	1.4 / *1.0 (55 / *39)	2.0 / *1.4 (79 / *55)	0.5 / *0.4 (20 / *16)	1.8 / *1.2 (71 / *47)	0.3 / *0.2 (12 / *8)
<b>RF680R (IP65)</b>  6GT2811-6AA10-0AA0 (ETSI) 6GT2811-6AA10-1AA0 (FCC) 6GT2811-6AA10-2AA0 (CMIIT) 6GT2811-6AA10-4AA0 (ARIB)	RF642A**  185 x 185 x 45	3.5 (138)	5.0 (197)	6.0 (236)	2.0 (79)	6.0 (236)	2.0 (79)
<b>RF650R (IP30)</b>  6GT2811-6AB20-0AA0 (ETSI) 6GT2811-6AB20-1AA0 (FCC) 6GT2811-6AB20-2AA0 (CMIIT) 6GT2811-6AB20-4AA0 (ARIB)	RF650A**  198 x 198 x 60	2.5 / *1.8 (98 / *71)	3.5 / *2.5 (138 / *98)	5.0 / *3.5 (197 / *138)	1.6 / *1.2 (63 / *47)	4.0 / *3.0 (157 / *118)	3.5 / *3.0 (138 / *118)
Antennas: 6GT2 812-0EA00 RF615A, linear, (ETSI) 6GT2 812-0EA01 RF615A, linear, (FCC, CMIIT, ARIB) 6GT2 812-1EA00, RF620A, linear, (ETSI) 6GT2 812-1EA01, RF620A, linear, (FCC, CMIIT, ARIB) 6GT2 812-1GA08, RF642A, linear, (all readers) 6GT2 812-0GB08 RF650A, circular, (all readers) 6GT2 812-0AA00, RF660A, circular, (ETSI) 6GT2 812-0AA01, RF660A, circular, (FCC, CMIIT, ARIB) 6GT2 812-2GB08 RF680A, switchable (all readers)	RF660A**  313 x 313 x 80	3.0 (118)	4.0 (157)	6.0 (236)	1.6 (63)	5.0 (197)	1.4 (55)
<b>Accessories</b>	**Antenna mounting kit (6GT2 890-2AB10)						

Maximum operating distance (m) and maximum operating distance (inch)

\* Use this value in combination with RF650R

pay attention to the system manual for range overshoot

<b>RF600 Family Matrix</b> <b>Industrial Tags</b> 865-868 MHz (ETSI) 902-928 MHz (FCC) Passive Tags (with Gen2 protocol) Operational Temperature Range Dimensions (L x W x D) mm Ingress Protection (IP) Rating		Antennas	RF610T	RF620T	RF625T	RF630T	RF640T	RF645T	RF680T	RF682T
			6GT2 810-2BB80 6GT2 810-2BB80-0AX1* 96/240 bit EPC, 64 byte  -40°C to 85°C 86 x 54 x 0.4 IP67	6GT2 810-2HC81 96/128 bit EPC, 64 byte  -40°C to 85°C 127 x 38 x 6 IP67	6GT2 810-2EE00 (ETSI) 6GT2 810-2EE01 (FCC) 96/128 bit EPC, 64 byte  -40°C to 125°C Ø 30 x 8 IP68/ IPx9K	6GT2 810-2EC00 (ETSI) 6GT2 810-2EC10 (FCC) 96/240 bit EPC, 64 byte  -40°C to 125°C Ø 21x 20 IP68/ IPx9K	6GT2 810-2DC00 (ETSI) 6GT2 810-2DC10 (FCC) 96/240 bit EPC, 64 byte  -40°C to 125°C Ø 50 x 8 IP68/ IPx9K	6GT2 810-2HC05 448 bit EPC, 256 byte  -40°C to 85°C 52 x 36 x 12,5 IP68	6GT2 810-2HG80 96/240 bit EPC, 64 byte  -40°C to 220°C 130 x 32 x 15 IP68/ IPx9K	6GT2810-3HG80 256 bit EPC, 384 byte  -40°C to 220°C 130 x 32 x 15 IP68/ IPx9K
<b>RF685R (IP65)</b> (internal antenna used) 6GT2811-6CA10-0AA0 (ETSI) 6GT2811-6CA10-1AA0 (FCC) 6GT2811-6CA10-2AA0 (CMIIT) 6GT2811-6CA10-4AA0 (ARIB)		<b>Integrated</b> 260 x 193 x 52 	5.0 (197)	7.0 (276)	2.0 (79)	2.0 (79)	3.5 (138)	6.0 (236)	5.0 (197)	4.0 (157)
<b>RF685R (IP65)</b> (external antenna used) 6GT2811-6CA10-0AA0 (ETSI) 6GT2811-6CA10-1AA0 (FCC) 6GT2811-6CA10-2AA0 (CMIIT) 6GT2811-6CA10-4AA0 (ARIB) <b>RF680R (IP65)</b> 6GT2811-6AA10-0AA0 (ETSI) 6GT2811-6AA10-1AA0 (FCC) 6GT2811-6AA10-2AA0 (CMIIT) 6GT2811-6AA10-4AA0 (ARIB) <b>RF650R (IP30)</b> 6GT2811-6AB20-0AA0 (ETSI) 6GT2811-6AB20-1AA0 (FCC) 6GT2811-6AB20-2AA0 (CMIIT) 6GT2811-6AB20-4AA0 (ARIB) Antennas: 6GT2 812-0EA00 RF615A, linear, (ETSI) 6GT2 812-0EA01 RF615A, linear, (FCC, CMIIT, ARIB) 6GT2 812-1EA00, RF620A, linear, (ETSI) 6GT2 812-1EA01, RF620A, linear, (FCC, CMIIT, ARIB) 6GT2 812-1GA08, RF642A, linear, (all readers) 6GT2 812-0GB08 RF650A, circular, (all readers) 6GT2 812-0AA00, RF660A, circular, (ETSI) 6GT2 812-0AA01, RF660A, circular, (FCC, CMIIT, ARIB) 6GT2 812-2GB08 RF680A, switchable (all readers)		RF615A  52 x 52 x 16	1.2 / *0.9 (47 / *35)	2.5 / *1.8 (98 / *71)	0.5 / *0.3 (20 / *12)	0.5 / *0.4 (20 / *16)	0.8 / *0.6 (31 / *24)	1.8 / *1.2 (71 / *47)	1.4 / *1.0 (55 / *39)	1.0 / *0.7 (39 / *28)
		RF620A  75 x 75 x 20	1.4 / *0.9 (55 / *35)	2.5 / *1.8 (98 / *71)	0.5 / *0.4 (20 / *16)	0.5 / *0.4 (20 / *16)	1.0 / *0.7 (39 / *28)	2.0 / *1.4 (79 / *55)	1.6 / *1.2 (63 / *47)	1.2 / *0.8 (47 / *31)
		RF642A**  185 x 185 x 45	4.5 (177)	8.0 (315)	1.8 (71)	2.0 (79)	4.0 / *2.5 (157 / *98)	6.0 (236)	5.0 (197)	4.5 (177)
		RF650A**  198 x 198 x 60	3.0 / *2.0 (118 / *79)	5.0 / *4.0 (197 / *157)	1.4 / *1.0 (55 / *39)	1.2 / *0.9 (47 / *35)	2.5 / *2.0 (98 / *79)	5.0 / *3.5 (197 / *138)	4.0 / *3.0 (157 / *118)	2.5 / *2.0 (98 / *79)
		RF660A**  313 x 313 x 80	3.5 (138)	6.0 (236)	1.4 (55)	1.8 (71)	3.0 / *2.0 (118 / *79)	5.0 (197)	4.5 (177)	4.0 (157)
		RF680A**  198 x 198 x 60	3.0 / *2.0 (118 / *79)	6.0 / *4.0 (236 / *157)	1.2 / *0.8 (47 / *31)	1.2 / *0.9 (47 / *35)	3.0 / *2.0 (118 / *79)	4.5 / *3.0 (177 / *118)	4.5 / *3.0 (177 / *118)	3.0 / *2.0 (118 / *79)
<b>Accessories</b>		**Antenna mounting kit (6GT2 890-2AB10)	20 mm Spacer (6GT2 190-0AA00) Fixing pocket (6GT2 190-0AB00)	Spacer (6GT2 898-2AA00)			Mounting cover 6GT2898-5AA00 Retaining bracket 6GT2898-5AB00	Retaining bracket 6GT2890-2AA00	Retaining bracket 6GT2890-2AA00	

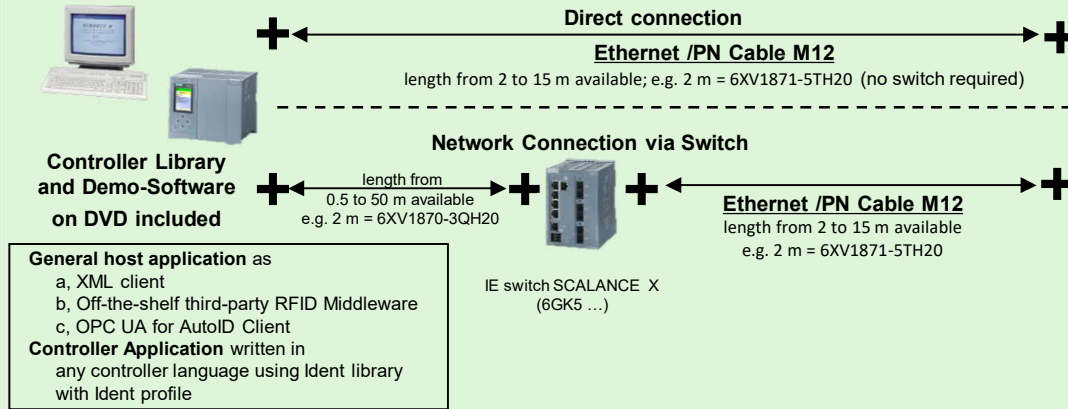
Maximum operating distance (m) and maximum operating distance (inch)

pay attention to the system manual for range overshoot

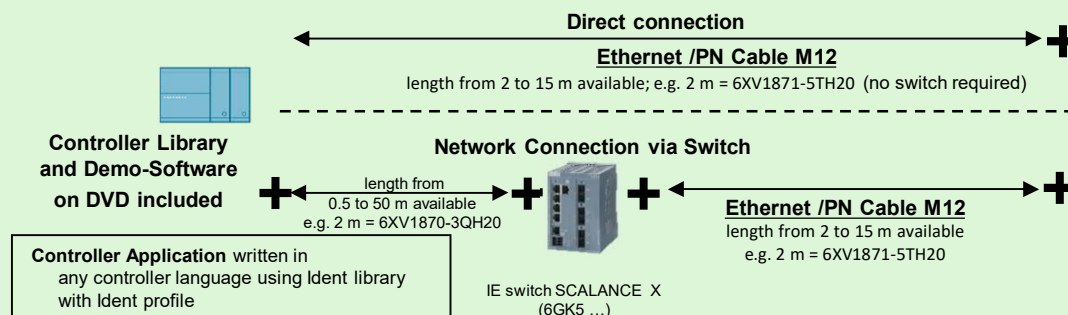
SIMATIC Ident Configuration Guide

\* Use this value in combination with RF650R

## Ethernet TCP/IP & PROFINET & OPC UA



## Ethernet/IP



## PROFIBUS



## Reader

**Connection with external power supply**



**RF610R**  
 (only internal antenna)  
 6GT2811-6BC10-0AA0 (ETSI)  
 6GT2811-6BC10-1AA0 (FCC)  
 6GT2811-6BC10-2AA0 (CMIIT)



**RF615R**  
 (internal antenna and optional 1 ext. antenna)  
 6GT2811-6CC10-0AA0 (ETSI)  
 6GT2811-6CC10-1AA0 (FCC)  
 6GT2811-6CC10-2AA0 (CMIIT)

**Power supply**  
**EU connector**  
 6GT2 898-0AC00  
**UK connector**  
 6GT2 898-0AC10  
**US connector**  
 6GT2 898-0AC20  
 cable 24 V for power supply  
 5 m = 6GT2 891-0PH50  
**cable w/ open ends**  
 2 m = 6GT2 891-4EH20  
 5 m = 6GT2 891-4EH50

**External antennas:**  
**RF615A**  
 6GT2 812-0EA00; ETSI  
 6GT2 812-0EA01; FCC, etc.  
**RF620A**  
 6GT2812-1EA00, ETSI  
 6GT2812-1EA01, FCC, etc.  
**RF642A**  
 6GT2 812-1GA08  
**RF650A**  
 6GT2 812-0GB08  
**RF660A**  
 6GT2 812-0AA00, ETSI  
 6GT2 812-0AA01, FCC, etc.  
**RF680A**  
 6GT2 812-2GB08  
**Antenna Mounting kit**  
 6GT2 890-2AB10  
**Antenna Cable**  
 1m = 6GT2815-0BH10  
 3m = 6GT2 815-0BH30  
 5m, flex = 6GT2 815-2BH50  
 10m, 2dB = 6GT2 815-1BN10  
 10m, 4dB = 6GT2 815-0BN10  
 15m, flex = 6GT2 815-2BN15  
 20m = 6GT2 815-0BN20  
 40m = 6GT2 815-0BN40  
**optional**  
**Power Splitter**  
 6GT2 890-0BC00  
**D/D/O interface**  
 Use a M12 A-coded connector  
 3RK1902-4BA00-5AA0  
**Cover caps**  
 6GT2898-4AA10

**Powered through connection cable**

## Labels

**RF630L**  
 6GT2 810-2AB02-0AX0  
 6GT2 810-2AB03  
 6GT2810-2AB04  
 6GT2810-2AC82  
 6GT2810-2AC84  
 6GT2 810-2AE81-0AX1  
 6GT2 810-2AE81-0AX3  
 6GT2810-2AE80-0AX2

**RF642L**  
 6GT2 810-3AC00 (ETSI)  
 6GT2 810-3AC10 (FCC)

**RF682L**  
 6GT2810-2AG84-0AX0

**RF690L**  
 6GT2 810-2AG00 (ETSI)  
 6GT2 810-2AG10 (FCC)

## Tags

**RF610T**  
 6GT2 810-2BB80  
 6GT2 810-2BB80-0AX1

**RF620T**  
 6GT2 810-2HC81

**RF625T**  
 6GT2 810-2EE00 (ETSI)  
 6GT2 810-2EE01 (FCC)

**RF630T**  
 6GT2 810-2EC00 (ETSI)  
 6GT2 810-2EC10 (FCC)

**RF640T Gen2**  
 6GT2 810-2DC00 (ETSI)  
 6GT2 810-2DC10 (FCC)

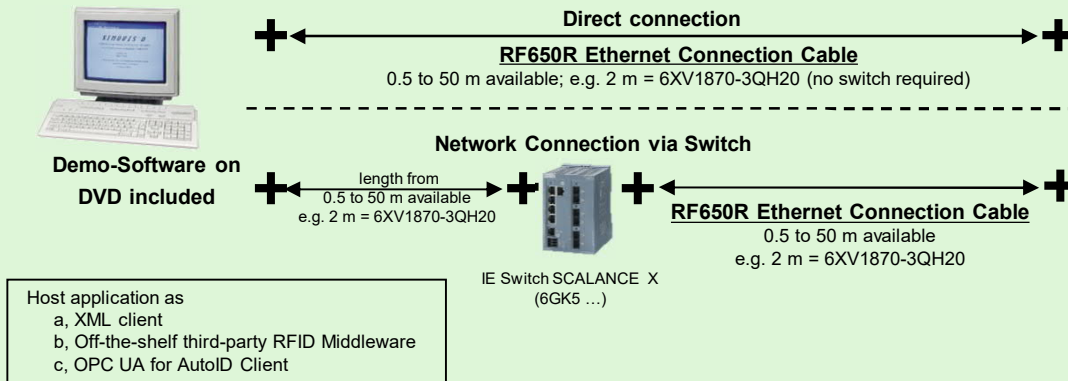
**RF645T**  
 6GT2 810-2HC05

**RF680T**  
 6GT2 810-2HG80

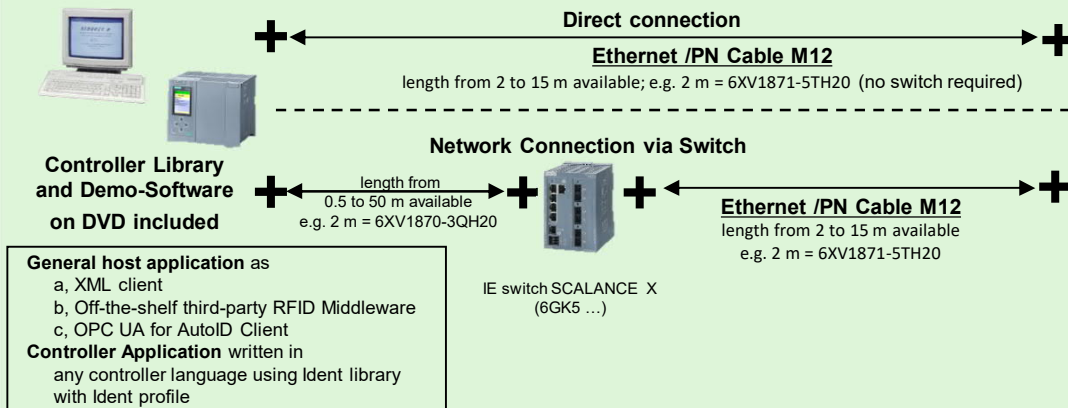
**RF682T**  
 6GT2 810-3HG80



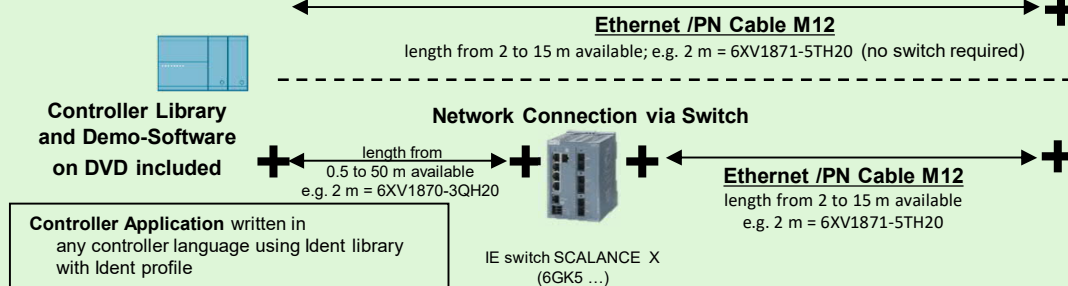
## Ethernet TCP/IP



## Ethernet TCP/IP & PROFINET & OPC UA



## Ethernet/IP



## Reader

with external power supply



**RF650R**  
(1 to 4 ext. antennas)

6GT2811-6AB20-0AA0 (ETSI)  
 6GT2811-6AB20-1AA0 (FCC)  
 6GT2811-6AB20-2AA0 (CMIIT)  
 6GT2811-6AB20-4AA0 (ARIB)



**RF680R**  
(1 to 4 ext. antennas)

6GT2811-6AA10-0AA0 (ETSI)  
 6GT2811-6AA10-1AA0 (FCC)  
 6GT2811-6AA10-2AA0 (CMIIT)  
 6GT2811-6AA10-4AA0 (ARIB)



**RF685R**  
(internal antenna and optional 1 ext. antenna)

6GT2811-6CA10-0AA0 (ETSI)  
 6GT2811-6CA10-1AA0 (FCC)  
 6GT2811-6CA10-2AA 0 (CMIIT)  
 6GT2811-6CA10-4AA0 (ARIB)

**Cover caps**  
(6GT2898-4AA10)

**RF615A**  
 6GT2 812-0EA00; ETSI  
 6GT2 812-0EA01; FCC, etc.

**RF620A**  
 6GT2812-1EA00, ETSI  
 6GT2812-1EA01, FCC, etc.

**RF642A**  
 6GT2 812-1GA08

**RF650A**  
 6GT2 812-0GB08

**RF660A**  
 6GT2 812-0AA00, ETSI  
 6GT2 812-0AA01, FCC, etc.

**RF680A**  
 6GT2 812-2GB08

**Antenna Mounting kit**  
 6GT2 890-2AB10

**Antenna Cable**

1m = 6GT2815-0BH10  
 3m = 6GT2 815-0BH30  
 5m, flex = 6GT2 815-2BH50  
 10m, 2dB = 6GT2 815-1BN10  
 10m, 4dB = 6GT2 815-0BN10  
 15m, flex = 6GT2 815-2BN15  
 20m = 6GT2 815-0BN20  
 40m = 6GT2 815-0BN40

**Power Splitter**  
 6GT2 890-0BC00  
 (do not use with RF680A)

**Power supply**

**EU connector**  
 6GT2 898-0AC00

**UK connector**  
 6GT2 898-0AC10

**US connector**  
 6GT2 898-0AC20

cable 24 V for power supply  
 5 m = 6GT2 891-0PH50

**cable w/ open ends**  
 2 m = 6GT2 891-4EH20  
 5 m = 6GT2 891-4EH50

**optional**

**DI/DO cable 5m**  
 6GT2891-0CH50

**Rail mounting set**  
 6GT2890-0AB00

## Labels

**RF630L**

6GT2 810-2AB02-0AX0  
 6GT2 810-2AB03  
 6GT2810-2AB04  
 6GT2810-2AC82  
 6GT2810-2AC84  
 6GT2 810-2AE81-0AX1  
 6GT2 810-2AE81-0AX3  
 6GT2810-2AE80-0AX2

**RF642L**

6GT2 810-3AC00 (ETSI)  
 6GT2 810-3AC10 (FCC)

**RF682L**

6GT2810-2AG84-0AX0

**RF690L**

6GT2 810-2AG00 (ETSI)  
 6GT2 810-2AG10 (FCC)

## Tags

**RF610T**

6GT2 810-2BB80  
 6GT2 810-2BB80-0AX1

**RF620T**

6GT2 810-2HC81

**RF625T**

6GT2 810-2EE00 (ETSI)  
 6GT2 810-2EE01 (FCC)

**RF630T**

6GT2 810-2EC00 (ETSI)  
 6GT2 810-2EC10 (FCC)

**RF640T Gen2**

6GT2 810-2DC00 (ETSI)  
 6GT2 810-2DC10 (FCC)

**RF645T**

6GT2 810-2HC05

**RF680T**

6GT2 810-2HG80

**RF682T**

6GT2 810-3HG80

## PROFIBUS

**ECOFAST Connection Block**  
(6ES7 194-3AA00-0AA0)

With Connector for adjusting PROFIBUS address  
(6ES7 194-1KB00-0XA0)

or

**M12 Connection Block**  
(6ES7 194-3AA00-0BA0)

**+**

**+**

A maximum of 1 Readers may be connected

← **ASM 456 to RF68xR** →

**+**

**ASM 456 (DP-V1)**  
Communication Module  
(6GT2 002-0ED00)

2 m = 6GT2 891-4FH20	5 m = 6GT2 891-4FH50	
10 m = 6GT2 891-4FN10	20 m = 6GT2 891-4FN20	

Reader connector 90° angled

2 m = 6GT2 891-4JH20	5 m = 6GT2 891-4JH50	
10 m = 6GT2 891-4JN10		

## Reader

powered through connection cable

**RF680R**  
(1 to 4 ext. antennas)

6GT2811-6AA10-0AA0 (ETSI)  
6GT2811-6AA10-1AA0 (FCC)  
6GT2811-6AA10-2AA0 (CMIIT)  
6GT2811-6AA10-4AA0 (ARIB)

**RF685R**  
(internal antenna and optional 1 ext. antenna)

6GT2811-6CA10-0AA0 (ETSI)  
6GT2811-6CA10-1AA0 (FCC)  
6GT2811-6CA10-2AA0 (CMIIT)  
6GT2811-6CA10-4AA0 (ARIB)

**Cover caps**  
(6GT2898-4AA10)

**RF615A**  
6GT2 812-0EA00; ETSI  
6GT2 812-0EA01; FCC, etc.

**RF620A**  
6GT2812-1EA00, ETSI  
6GT2812-1EA01, FCC, etc.

**RF642A**  
6GT2 812-1GA08

**RF650A**  
6GT2 812-0GB08

**RF660A**  
6GT2 812-0AA00, ETSI  
6GT2 812-0AA01, FCC, etc.

**RF680A**  
6GT2 812-2GB08

**Antenna Mounting kit**  
6GT2 890-2AB10

**Antenna Cable**

1m	= 6GT2815-0BH10
3m	= 6GT2 815-0BH30
5m, flex	= 6GT2 815-2BH50
10m, 2dB	= 6GT2 815-1BN10
10m, 4dB	= 6GT2 815-0BN10
15m, flex	= 6GT2 815-2BN15
20m	= 6GT2 815-0BN20
40m	= 6GT2 815-0BN40

**Power Splitter**  
6GT2 890-0BC00  
(do not use with RF680A)

### Labels

**RF630L**  
6GT2 810-2AB02-0AX0  
6GT2 810-2AB03  
6GT2810-2AB04  
6GT2810-2AC82  
6GT2810-2AC84  
6GT2 810-2AE81-0AX1  
6GT2 810-2AE81-0AX3  
6GT2810-2AE80-0AX2

**RF642L**  
6GT2 810-3AC00 (ETSI)  
6GT2 810-3AC10 (FCC)

**RF682L**  
6GT2810-2AG84-0AX0

**RF690L**  
6GT2 810-2AG00 (ETSI)  
6GT2 810-2AG10 (FCC)

### Tags

**RF610T**  
6GT2 810-2BB80  
6GT2 810-2BB80-0AX1

**RF620T**  
6GT2 810-2HC81

**RF625T**  
6GT2 810-2EE00 (ETSI)  
6GT2 810-2EE01 (FCC)

**RF630T**  
6GT2 810-2EC00 (ETSI)  
6GT2 810-2EC10 (FCC)

**RF640T Gen2**  
6GT2 810-2DC00 (ETSI)  
6GT2 810-2DC10 (FCC)

**RF645T**  
6GT2 810-2HC05










**RF680T**  
6GT2 810-2HG80

**RF682T**  
6GT2 810-3HG80




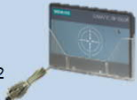

**optional**

**DI/DO cable 5m**  
6GT2891-0CH50

**Rail mounting set**  
6GT2890-0AB00

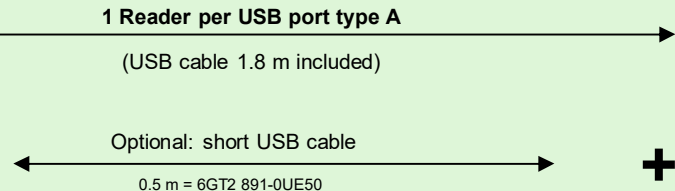
<b>RF1000</b> <b>Family Matrix</b> 13.56 MHz / ISO 15693 Passive Tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>D100</b> 6GT2 600-0AD10 112 byte EEPROM  -25°C to 80°C 85,6 x 54 x 0.9 IP68	<b>D200</b> 6GT2 600-1AD00 -0AX0 256 byte EEPROM  -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D400</b> 6GT2 600-4AD00 2 kbyte FRAM  -20°C to 60°C 85.6 x 54 x 0.8 IP67	<b>D126</b> 6GT2 600-0AE00 112 byte EEPROM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D426</b> 6GT2 600-4AH00 2 kbyte FRAM  -40°C to 100°C Ø 50 x 3.6 IP68	<b>D526</b> 6GT2 600-5AH00 8 kbyte FRAM  -40°C to 100°C Ø 50 x 3.6 IP68
<b>RF1040R</b> 6GT2831-6CA50, USB RS232 	30 (1.18)	30 (1.18)	30 (1.18)	30 (1.18)	30 (1.18)	30 (1.18)
<b>RF1060R</b> 6GT2831-6AA50, USB 	30 (1.18)	30 (1.18)	30 (1.18)	30 (1.18)	30 (1.18)	30 (1.18)
<b>RF1070R</b> 6GT2831-6BA50, USB RS232 	30 (1.18)	30 (1.18)		30 (1.18)		

**Maximum Distance for Stationary Tag (mm)**  
 Maximum Distance for Stationary Tag (inch)

<b>RF1000 Family Matrix</b> 13.56 MHz others 125 kHz passive tags  Operational temperature range Dimensions (L x W x D) mm Ingress Protection (IP) rating	<b>E600</b> 6GT2 300-0AA00 752 byte EEPROM    -25°C to 60°C 86 x 54 x 0.76 IP68	<b>E611</b> 6GT2 300-0BB00 752 byte EEPROM    -40°C to 85°C 86 x 54 x 2.5 IP67	<b>ISO 14443</b>    Company badges and transponders acc. ISO 14443 A/B	<b>Legic</b>    Company badges and Transponders acc. Legic Prime and Legic Advant	<b>125 kHz (LF)</b>    Company badges and Transponders acc. Hitag 1/2/S and EM41xx
<b>RF1040R</b> 6GT2831-6CA50, USB RS232 	30 (1.18)	30 (1.18)	30 (1.18)		30 (1.18)
<b>RF1060R</b> 6GT2831-6AA50, USB 	30 (1.18)	30 (1.18)	30 (1.18)		
<b>RF1070R</b> 6GT2831-6BA50, USB RS232 	30 (1.18)	30 (1.18)	30 (1.18)	30 (1.18)	

**Maximum Distance for Stationary Tag (mm)**  
 Maximum Distance for Stationary Tag (inch)

## USB



- DLL and simple Demo for PC:**  
<https://support.industry.siemens.com/cs/ww/en/view/109741590>
- Local user administration for Comfort Panels and IPC:**  
<https://support.industry.siemens.com/cs/ww/en/view/99808171>  
<https://support.industry.siemens.com/cs/de/en/view/109754400> (SIMATIC HMI Option+)
- Central user management PM Logon**  
<https://www.siemens.com/pm-logon>
- SIMATIC Logon / Logon Remote Access**  
<https://support.industry.siemens.com/cs/ww/en/view/109749167>

## Reader

Powered through USB cable



**RF1040R**  
(6GT2 831-6CA50)



**RF1060R**  
(6GT2 831-6AA50)



**RF1070R**  
(6GT2 831-6BA50)

### Optional:

#### Card holder



6GT2 890-0CA00

#### Config-Card (for customer-specific reader configuration)



6GT2300-0CC00-0AX0

#### Extension unit IP65 for operator controls

- 12" 6AV7674-1LA31-0AA0
- 15" 6AV7674-1LA41-0AA0
- 19" 6AV7674-1LA51-0AA0
- 22" 6AV7674-1LA61-0AA0



## Tags



- D100** (6GT2 600-0AD10)
- D200** (6GT2 600-1AD00-0AX0)
- D400** (6GT2 600-4AD00)\*



- D126** (6GT2 600-0AE00)
- D426** (6GT2 600-4AH00)\*
- D526** (6GT2 600-5AH00)\*



Company badges and transponders acc. ISO 14443 A/B Incl. MDS E600/E611



Transponders acc. ISO 15693



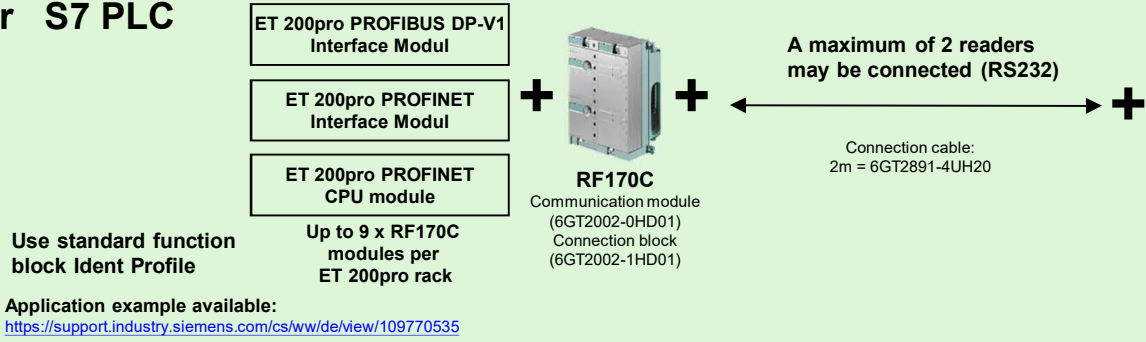
Company badges and Transponders acc. Legic Prime and Legic Advant



Company badges and Transponders acc. Hitag 1/2/S and EM41xx

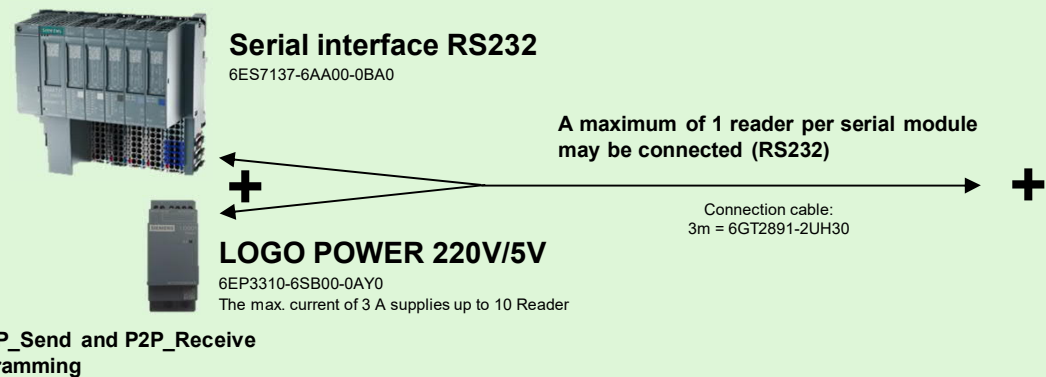
**Tag restrictions:**  
\* not for RF1070R  
\*\* only with RF1070R  
\*\*\* only with RF1040R

## ET 200pro via PROFIBUS or PROFINET or S7 PLC



## ET 200SP via serial modul

(example also useful for the connection to other serial modules)



## Reader

Powered through connection cable

**RF1040R**  
(6GT2 831-6CA50)

**RF1070R**  
(6GT2 831-6BA50)

**Optional:**

**Card holder**  
6GT2 890-0CA00

**Config-Card**  
(for customer-specific reader configuration)  
6GT2300-0CC00-0AX0

**Extension unit IP65 for operator controls**

12"	6AV7674-1LA31-0AA0
15"	6AV7674-1LA41-0AA0
19"	6AV7674-1LA51-0AA0
22"	6AV7674-1LA61-0AA0



## Tags



- D100 (6GT2 600-0AD10)
- D200 (6GT2 600-1AD00-0AX0)
- D400 (6GT2 600-4AD00)\*
- D126 (6GT2 600-0AE00)
- D426 (6GT2 600-4AH00)\*
- D526 (6GT2 600-5AH00)\*
- ISO 14443
- Company badges and transponders acc. ISO 14443 A/B Incl. MDS E600/E611
- ISO 15693
- Transponders acc. ISO 15693
- Legic Prime \*\*)
- Company badges and Transponders acc. Legic Prime and Legic Advant
- LF RFID \*\*\*)
- Company badges and Transponders acc. Hitag 1/2/S and EM41xx

Tag restrictions:  
\* not for RF1070R  
\*\* only with RF1070R  
\*\*\* only with RF1040R






## RF350M

Packaged Systems		Additional Components	Spare Parts
Packaged Systems include Handheld unit, RFID read/ write head, and battery		<b>Docking/ Charging Unit</b>  6GT2803-0BM00	<b>Spare Battery</b> 6GT2803-0CA00
 <b>RF350M</b> internal antenna	<b>6GT2 803-1BA00</b> suitable for RF200, RF300, MDS E* and MDS D tags, except for D117, D127, D421, D422 and E623		

Packaged Systems		Additional Components	Spare Parts																																	
Packaged Systems include Handheld unit, RFID read/ write head, and battery <b>(Antenna and cable for usage is not included)</b>		<b>Docking/ Charging Unit</b>  6GT2803-0BM00	<b>Spare Battery</b> 6GT2803-0CA00																																	
 <b>RF350M</b> external antenna	<b>6GT2 803-1BA10</b> Needs external antenna with antenna cable for usage  suitable for RF200, RF300, MDS E* and MDS D tags according table in right column  *) from hardware version AS02: MDS E and MDS D5xx transponders are supported	<table border="1"> <thead> <tr> <th colspan="3">External Antenna</th> </tr> <tr> <th>Antenna without cable</th> <th>MLFB</th> <th>Suitable for</th> </tr> </thead> <tbody> <tr> <td>Ant 3</td> <td>6GT2398-1CD30-0AX0</td> <td>D124, D160, D324, D422, D423, D424, D425, D428, D460, D522, D524, D525, D528, E624, RF320T, RF330T, RF340T, RF350T, RF360T</td> </tr> <tr> <td>Ant 3S</td> <td>6GT2398-1CD50-0AX0</td> <td>D117, D127, D421, D521</td> </tr> <tr> <td>Ant 8</td> <td>6GT2 398-1CF00</td> <td>D117, D127, D421</td> </tr> <tr> <td>Ant 12</td> <td>6GT2 398-1DC00</td> <td>D117, D127, D160, D421, D428, D460, D521, D528, E623, RF330T</td> </tr> <tr> <td>Ant 18</td> <td>6GT2 398-1DA00</td> <td>D117, D124, D127, D160, D324, D421, D422, D424, D425, D428, D460, D521, D522, D524, D525, D528, E623, E624, RF320T, RF330T, RF340T</td> </tr> <tr> <td>Ant 30</td> <td>6GT2 398-1DD00</td> <td>D124, D126, D160, D324, D422, D423, D424, D425, D426, D428, D460, D522, D524, D525, D526, D528, E624, RF320T, RF330T, RF340T, RF350T, RF360T</td> </tr> <tr> <th>Antenna cables</th> <th>MLFB</th> <th>Suitable for</th> </tr> <tr> <td>0.1 m</td> <td>6GT2 898-0EA00</td> <td rowspan="2">For all antenna types above</td> </tr> <tr> <td>3 m</td> <td>6GT2 391-0AH30</td> </tr> </tbody> </table>		External Antenna			Antenna without cable	MLFB	Suitable for	Ant 3	6GT2398-1CD30-0AX0	D124, D160, D324, D422, D423, D424, D425, D428, D460, D522, D524, D525, D528, E624, RF320T, RF330T, RF340T, RF350T, RF360T	Ant 3S	6GT2398-1CD50-0AX0	D117, D127, D421, D521	Ant 8	6GT2 398-1CF00	D117, D127, D421	Ant 12	6GT2 398-1DC00	D117, D127, D160, D421, D428, D460, D521, D528, E623, RF330T	Ant 18	6GT2 398-1DA00	D117, D124, D127, D160, D324, D421, D422, D424, D425, D428, D460, D521, D522, D524, D525, D528, E623, E624, RF320T, RF330T, RF340T	Ant 30	6GT2 398-1DD00	D124, D126, D160, D324, D422, D423, D424, D425, D426, D428, D460, D522, D524, D525, D526, D528, E624, RF320T, RF330T, RF340T, RF350T, RF360T	Antenna cables	MLFB	Suitable for	0.1 m	6GT2 898-0EA00	For all antenna types above	3 m	6GT2 391-0AH30	
		External Antenna																																		
Antenna without cable	MLFB	Suitable for																																		
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Ant 30	6GT2 398-1DD00	D124, D126, D160, D324, D422, D423, D424, D425, D426, D428, D460, D522, D524, D525, D526, D528, E624, RF320T, RF330T, RF340T, RF350T, RF360T																																		
Antenna cables	MLFB	Suitable for																																		
0.1 m	6GT2 898-0EA00	For all antenna types above																																		
3 m	6GT2 391-0AH30																																			

## RF600

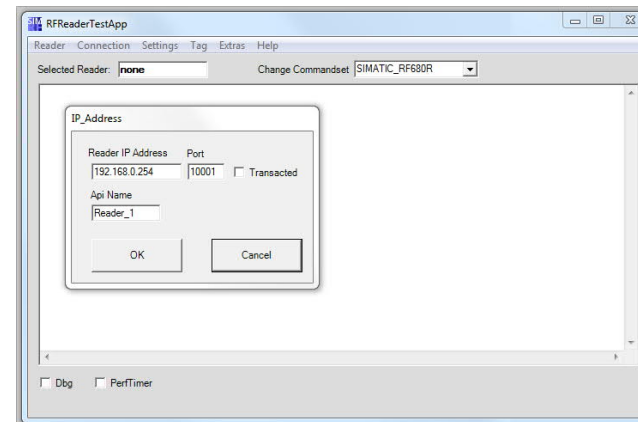
Packaged Systems		Additional Components	Spare Parts
Packaged Systems include Handheld unit, RFID read/ write head, integrated WLAN and battery		<b>Docking/ Charging Unit</b>  6GT2 898-0BB00	
 <b>RF650M</b>	<b>6GT2 813-0CA00 (ETSI)</b>		<b>Spare Battery</b> 6GT2 898-0CB00
 <b>RF650M</b>	<b>6GT2 813-0CA10 (FCC)</b>		



**SIMATIC Ident DVD**  
6GT2 080-2AA20

## SIMATIC Ident Software DVD contains:

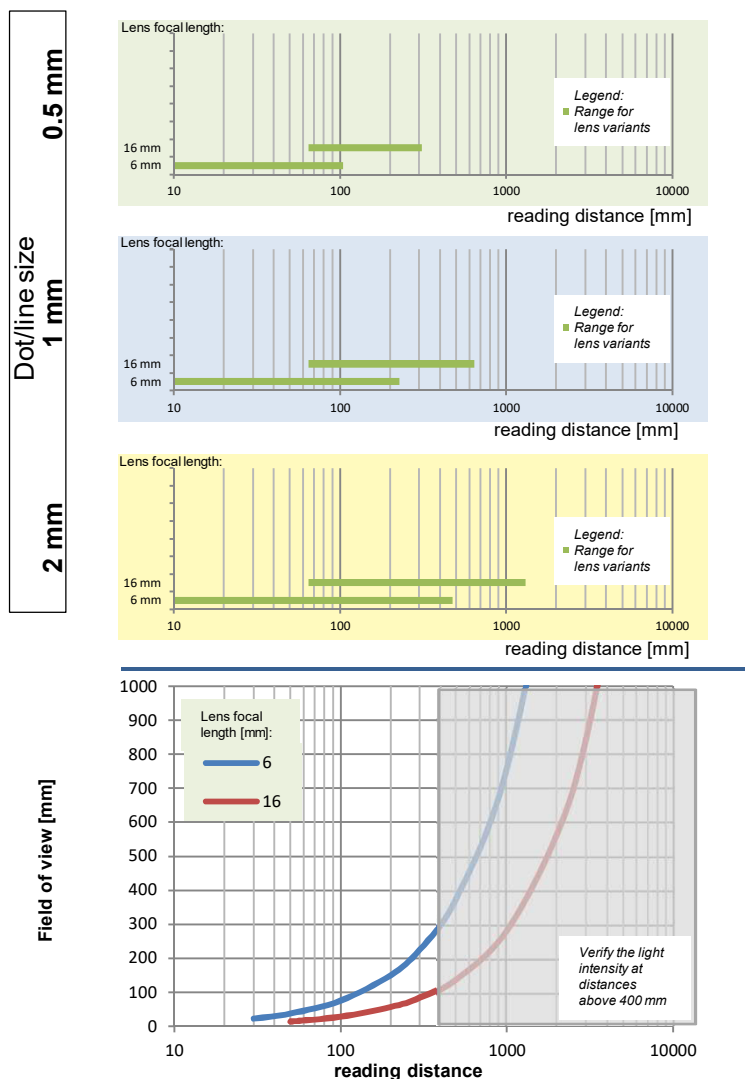
- Complete manual set in all available languages
- Includes all manuals for optical identification
- S7 FBs for STEP 7 and TIA-Portal
- RF200/ RF300 PC Application
- Programming Libraries (APIs)
- Start up and Demo for RF182C via Ethernet
- Example applications with source code and description
- RFID PC demo program
- Tag temperature calculation software
- HSP files for S7
- PROFIBUS/ PROFINET GSD/GSDML files
- IO-Link IODD files
- Tool for data throughput calculation
- Documentation archive for legacy products



- Steps for selecting lens:**
1. Define the smallest dot size on DMC code or line width at barcode. Use the horizontal graph next to your size selection in the upper section
  2. Define the reading distance and draw a vertical line with a ruler (note: SR-B and SR-P have use the same diagrams)
  3. Select a lens and a camera type combination in the upper diagrams which fit best (green bars crossing)
  4. Verify at the lower diagrams that the field of view is within the range of your application

Note: For a more detailed selection or if your application is out the presented range ask the presales team at [presales.ci.industry@siemens.com](mailto:presales.ci.industry@siemens.com)

Basic Models: **SR-B** (6GF3420-0AA20) or **SR-P** (6GF3420-0AA40)



## MV420, MV440 and MV500: light and filter selection

light and filter selection	Information for selection	MV420	MV440	MV500
Red light	The most popular light with a high light intensity	6GF3420-0AC00-1LT0	6GF3440-8DA11; 6GF3400-0LT01-8DA1 (external)	6GF3540-8DA11 (Basic) 6GF3540-8DA13 (Multi) 6GF3540-8DA12 (far) 6GF3400-0LT01-8DA1 (external)
White light	Use white light if the color of the objects varies	6GF3420-0AC00-2LT0	6GF3440-8DA21	6GF3540-8DA23 (Multi)
Green light	For usage with PCB and other green materials marked with dark codes		6GF3440-8DA31	
Infrared light	No bothersome flashes	6GF3420-0AC00-3LT0	6GF3440-8DA41; 6GF3400-0LT01-7BA1 (external)	6GF3540-8DA41 (Basic) 6GF3540-8DA42 (far) 6GF3400-0LT01-7BA1 (external)
Blue filter	Only blue light passes. This may improve the structures of an object		6GF9001-2AE	6GF9001-2AE
Infrared filter	The usage together with infrared light filters completely the influence of daylight		6GF9001-2AD	6GF9001-2AD
Daylight filter	For protection of the camera against laser light beyond the visible spectrum		6GF3440-8EA1	6GF3440-8EA1
Polarization filter	Use this filter to reduce reflections at metallic or shiny parts (i.e. plastic foils)		6GF9001-2AF	Included in Multi-lights

# MV440: camera and lens selection

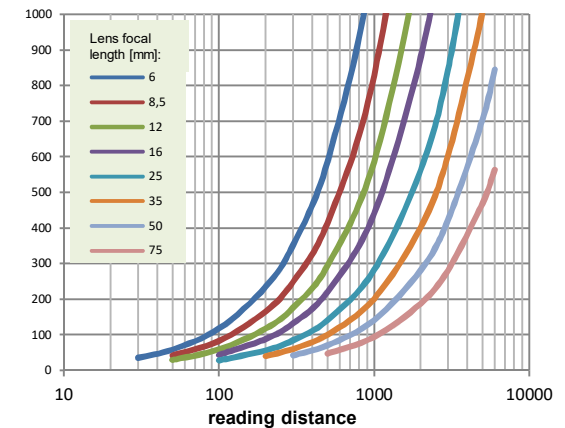
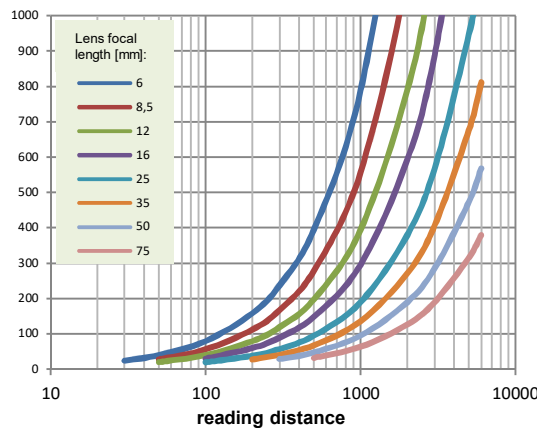
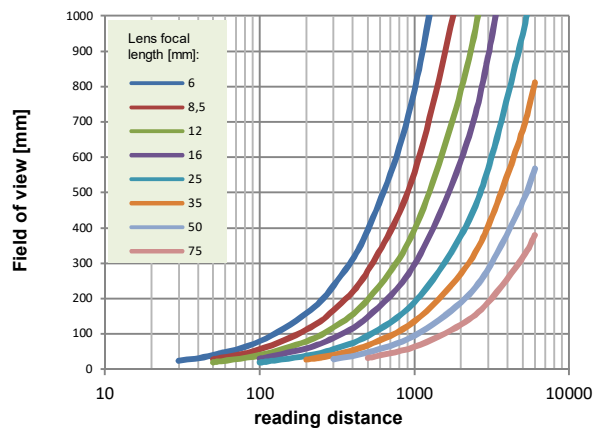
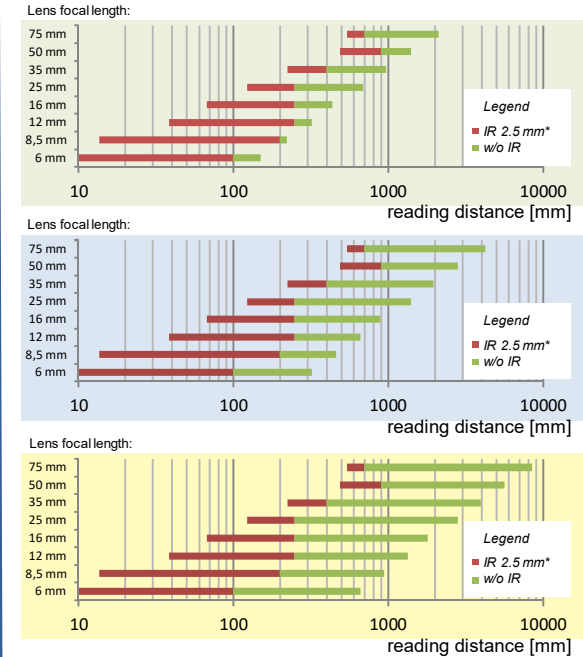
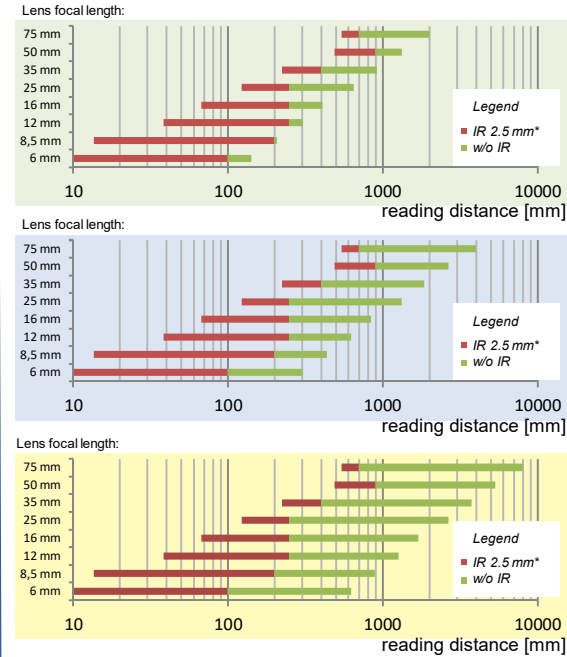
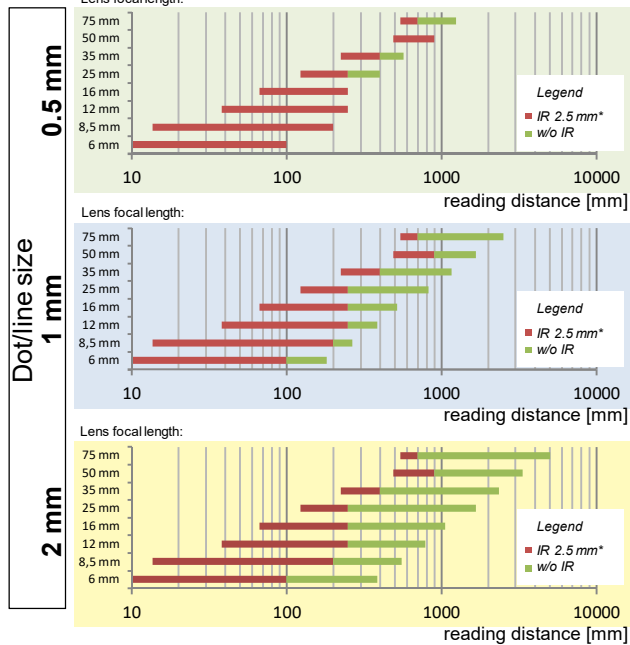
- Steps for selecting lens:**
1. Define the smallest dot size on DMC code or line width at barcode. Use the horizontal graphs next to your size selection in the upper section
  2. Define the reading distance with a ruler at every camera type (SR, HR, UR)
  3. Select a lens and a camera type combination in the upper diagrams which fit best (green bar crossing or red bar crossing (intermediate rings (IR) required))
  4. Verify at the lower diagrams that the field of view is within the range of your application

Note: For a more detailed selection or if your application is out the presented range ask the presales team at [presales.ci.industry@siemens.com](mailto:presales.ci.industry@siemens.com)

Basic Models: **SR** (6GF3440-1CD10)

**HR** (6GF3440-1GE10)

**UR** (6GF3440-1LE10)



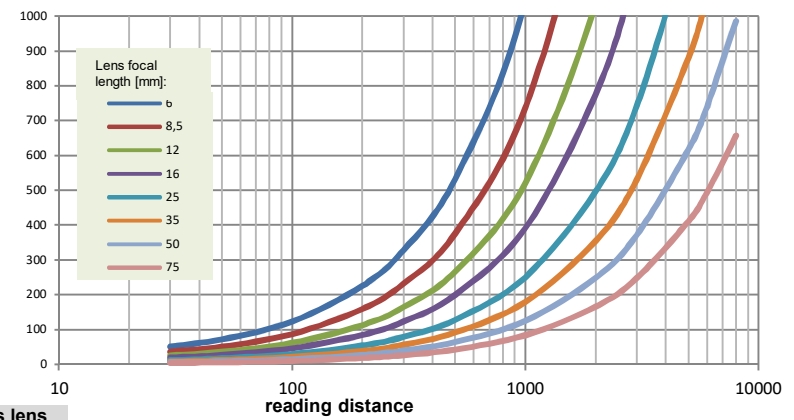
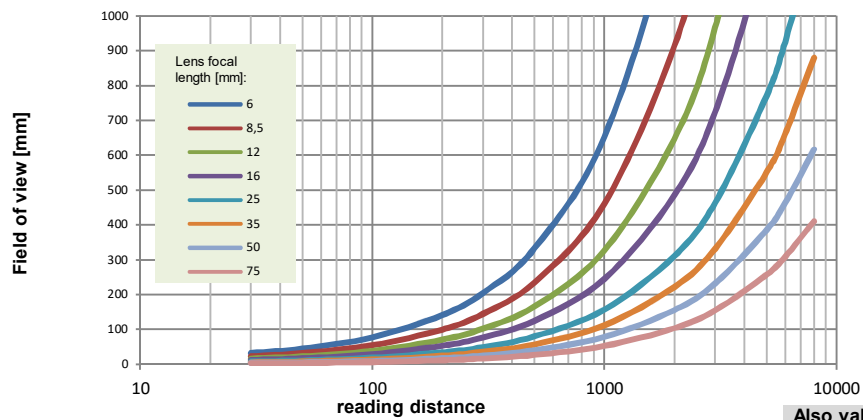
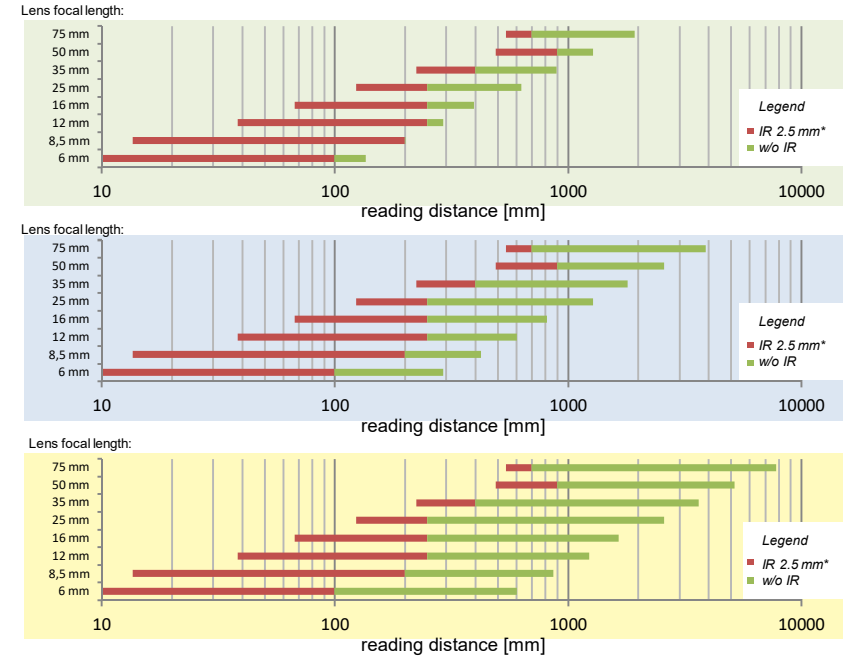
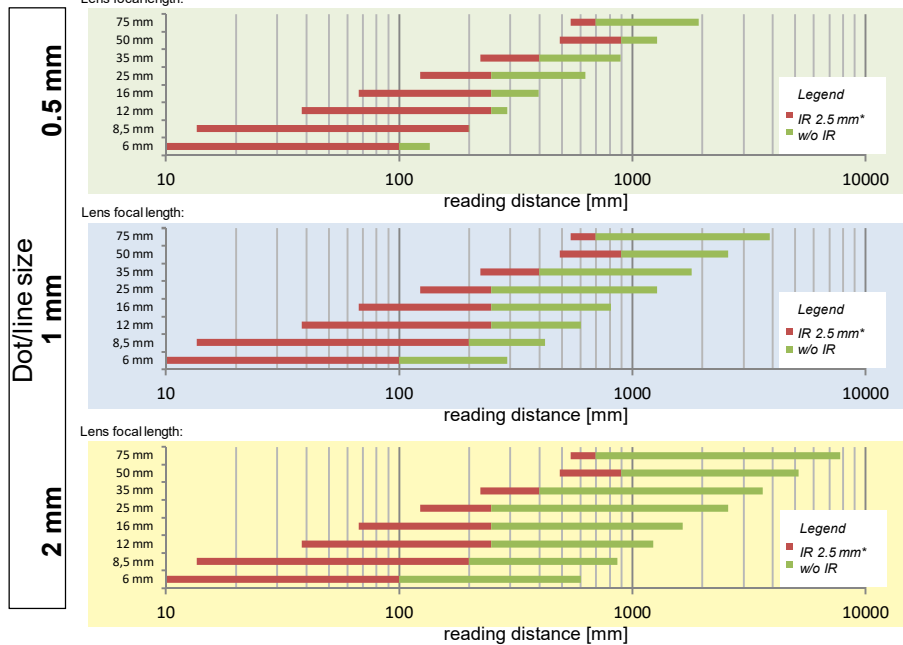
# MV540 & MV550: camera and lens selection

- Steps for selecting lens:**
1. Define the smallest dot size on DMC code or line width at barcode. Use the horizontal graphs next to your size selection in the upper section
  2. Define the reading distance and draw a vertical line with a ruler at every camera type (S, H)
  3. Select a lens and a camera type combination in the upper diagrams which fit best (green bar crossing or red bar crossing (intermediate rings (IR) required))
  4. Verify at the lower diagrams that the field of view is within the range of your application

Note: For a more detailed selection or if your application is out the presented range ask the presales team at [presales.ci.industry@siemens.com](mailto:presales.ci.industry@siemens.com)

Basic Models: **S** (6GF3540-0CD10)

**H** (6GF3540-0GE10)



Also valid for E-Focus lens



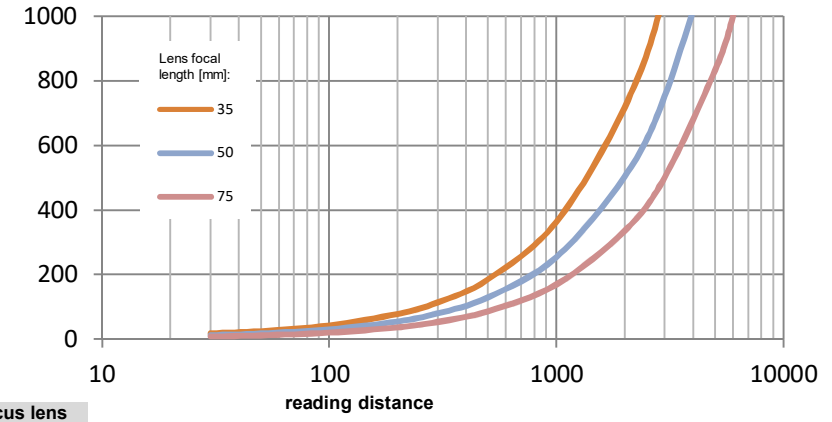
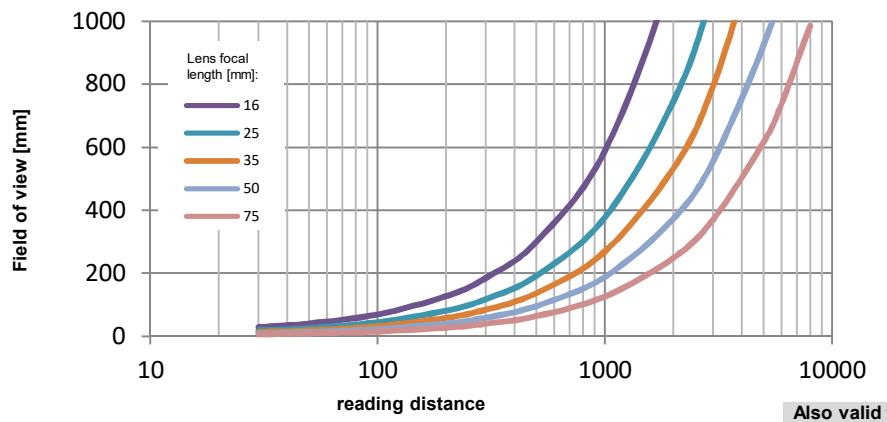
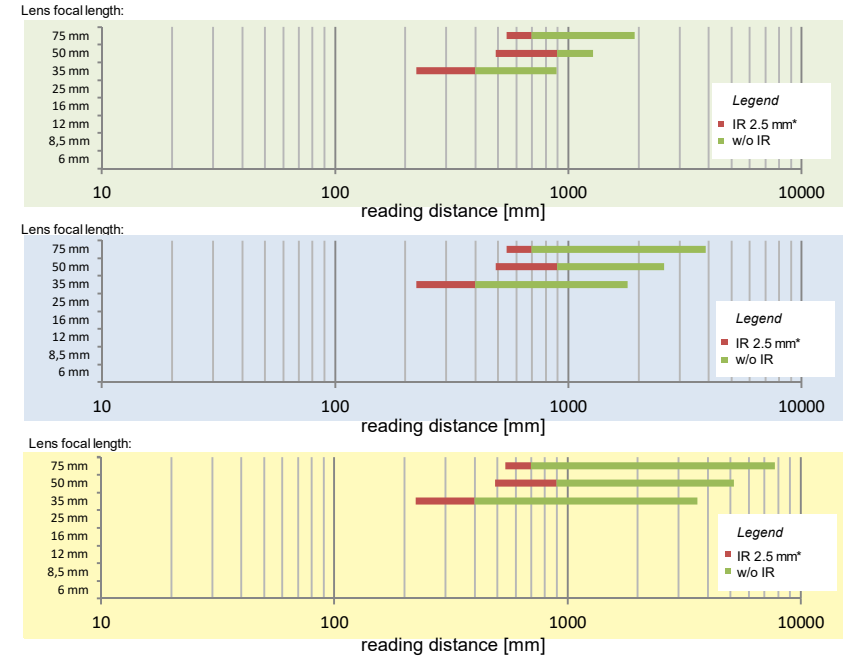
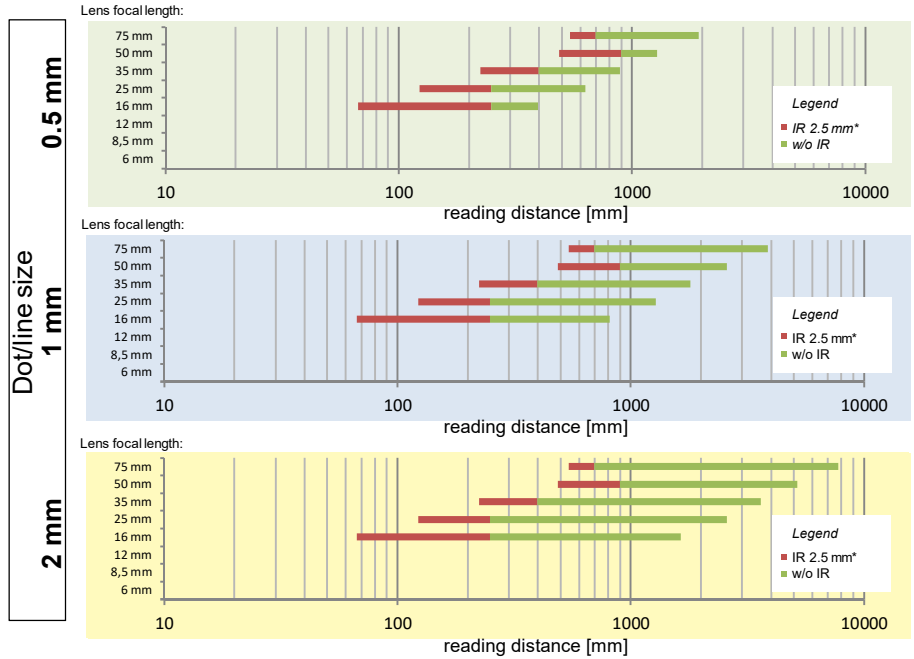
# MV560: camera and lens selection

- Steps for selecting lens:**
1. Define the smallest dot size on DMC code or line width at barcode. Use the horizontal graphs next to your size selection in the upper section
  2. Define the reading distance and draw a vertical line with a ruler at every camera type (U, X)
  3. Select a lens and a camera type combination in the upper diagrams which fit best (green bar crossing or red bar crossing (intermediate rings (IR) required))
  4. Verify at the lower diagrams that the field of view is within the range of your application

Note: For a more detailed selection or if your application is out the presented range ask the presales team at [presales.ci.industry@siemens.com](mailto:presales.ci.industry@siemens.com)

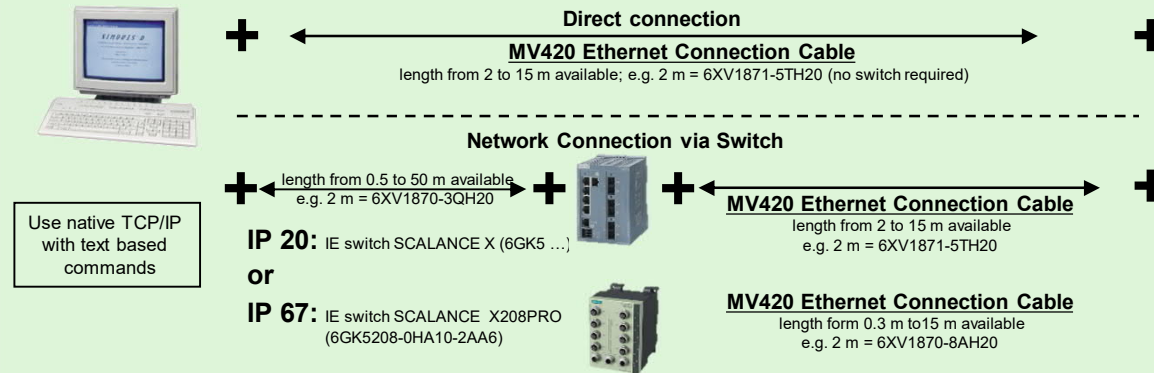
Basic Models: **U** (6GF3560-0LE10)

**X** (6GF3560-0HE10)

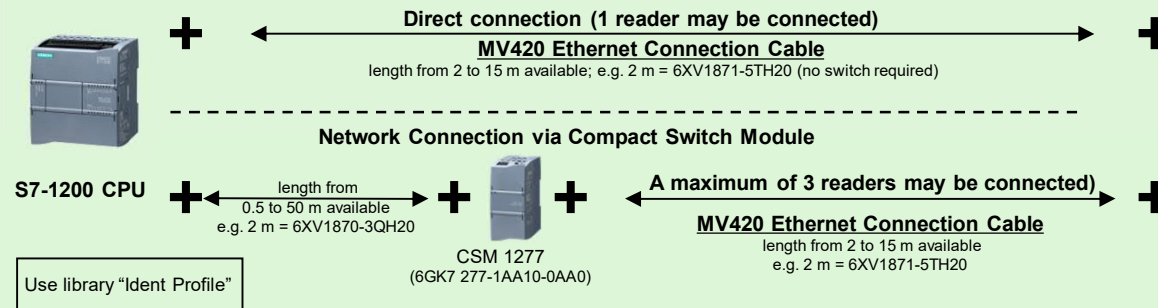


Also valid for E-Focus lens

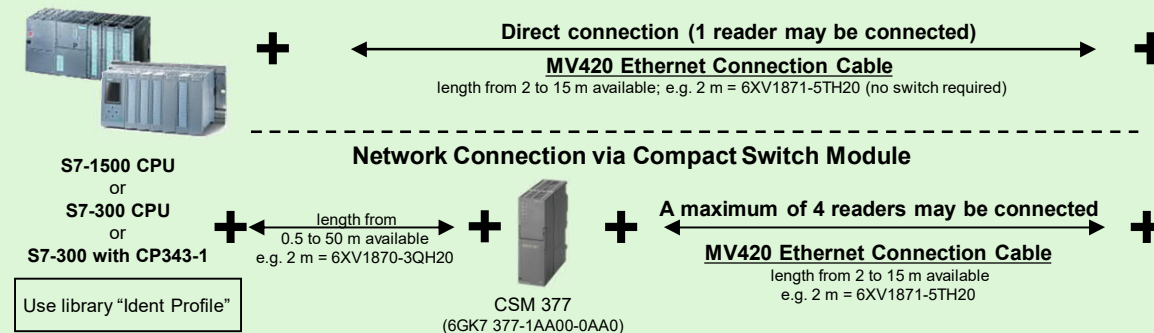
## Ethernet TCP/IP



## S7-1200 via Industrial Ethernet or PROFINET



## S7-300/1500 via Industrial Ethernet or PROFINET



## Reader

With external power supply



**MV420 complete**  
 6 mm lens, red light  
 (SR-B: 6GF3420-0AA20)  
 (SR-P: 6GF3420-0AA40)

## Options

### DI/DO

Wires included in power supply cable  
 Open wires

### Optional



#### Lens

6 mm  
 (6GF3420-0AC00-0LK0)  
 16 mm  
 (6GF3420-0AC00-1LK0)



#### Lights

red  
 (6GF3420-0AC00-1LT0)  
 infrared  
 (6GF3420-0AC00-3LT0)

### Support

Mounting bracket  
 6GF3420-0AC00-1AA0

### Cable for power supply

#### Open wires

10 m = 6GF3440-8BA2  
 30 m = 6GF3440-8BA4

#### or Push Pull

1.5 m = 6GF3400-0BH15  
 2 m = 6GF3400-1BH20

## SIMATIC PLC

S7-1200



A maximum of 1 reader may be connected  
**RF120C to MV420**

2 m = 6GT2 091-4LH20  
5 m = 6GT2 091-4LH50  
10 m = 6GT2 091-4LN10

adapting cable:  
2 m = 6GF3420-0AC00-2CB0

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

## SIMATIC PLC

S7-300 Rack or  
S7-400 via ET 200M  
(DP-V1/PN-IO)



**Accessories:**  
Connecting element (6ES7 390-5AA00-0AA0)  
Terminal element (6ES7 390-5BA00-0AA0)

A maximum of 2 readers may be connected  
**ASM 475 to MV420**

2 m = 6GT2 891-4EH20  
5 m = 6GT2 891-4EH50

adapting cable:  
2 m = 6GF3420-0AC00-2CB0

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

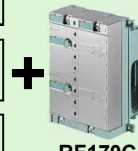
**ET 200pro**  
via PROFIBUS  
or PROFINET  
or S7 PLC

ET 200pro PROFIBUS DP-V1  
Interface module

ET 200pro PROFINET  
Interface module

ET 200pro PROFINET  
CPU module

Up to 9 x 170C  
modules per  
ET 200pro rack



Communication module  
(6GT2002-0HD01)  
Connection block  
(6GT2002-1HD01)

A maximum of 2 readers may be connected  
**RF170C to MV420**

Extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

adapting cable:  
2 m = 6GF3420-0AC00-2CB

## PROFIBUS

**ECOFAS** Connection Block  
(6ES7 194-3AA00-0AA0)  
With Connector for adjusting  
PROFIBUS address  
(6ES7 194-1KB00-0XA0)  
or  
**M12** Connection Block  
(6ES7 194-3AA00-0BA0)



A maximum of 2 readers may be connected  
**ASM 456/ RF160C to MV420**

Extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

adapting cable:  
2 m = 6GF3420-0AC00-2CB0

## Reader

powered through connection cable



**MV420 complete**  
6 mm lens, red light  
(SR-B: 6GF3420-0AA20)  
(SR-P: 6GF3420-0AA40)

## Options

### DI/DO

Use cable „Power  
supply DIO  
RS232“ +  
distribution frame  
instead of  
adapting cable

10 m = 6GF3440-8BA2  
30 m = 6GF3440-8BA4

### Web Interface

Use additional IE  
cable

Various lengths available  
2 m = 6XV1871-5TH20

### Optional



#### Lens

6 mm  
(6GF3420-0AC00-0LK0)  
16 mm  
(6GF3420-0AC00-1LK0)



#### Lights

red  
(6GF3420-0AC00-1LT0)  
infrared  
(6GF3420-0AC00-3LT0)

### Support

Mounting bracket  
6GF3420-0AC00-1AA0

# MV420 System Interfaces

## PROFINET & OPC UA

### Communication Modules



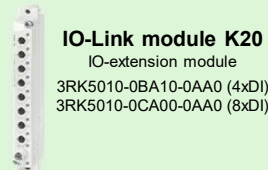
A maximum of  
**1 reader at RF185C,**  
**2 readers at RF186C/CI,**  
**4 readers at RF188C/CI**  
of MV420 may be connected

Extension cables: + adapting cable:  
 2 m = 6GT2 891-4FH20 + 2 m = 6GF3420-0AC00-2CB0  
 5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10  
 20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

### Additional IOs



+ ← → +  
**RF18xCI to sensor**  
 1.5 m = 3RK1902-4PB15-3AA0  
 5 m = 6GT2 891-4MH50  
 10 m = 6GT2 891-4MN10



Or one  
**Standard sensor**  
 Or one  
**Actor**

## Ethernet TCP/IP



Ethernet TP cable through switch. See Page 75 for RF182C Cabling/ Connectors



+ ← → +  
**A maximum of 2 readers may be connected**  
**RF182C to MV420**

Extension cables: + adapting cable:  
 2 m = 6GT2 891-4FH20 + 2 m = 6GF3420-0AC00-2CB0  
 5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10  
 20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

Computers and non Siemens PLCs

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 Push Pull RJ45 (6GT2 002-2JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

## Ethernet/IP

**RFID 181EIP**  
 Communication Module  
 (6GT2 002-0JD20)



+ ← → +  
**A maximum of 2 readers may be connected**  
**RFID 1801EIP to MV420**

Extension cables: + adapting cable:  
 2 m = 6GT2 891-4FH20 + 2 m = 6GF3420-0AC00-2CB0  
 5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10  
 20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

## Reader

powered through connection cable



**MV420 complete**  
 6 mm lens, red light  
 (SR-B: 6GF3420-0AA20)  
 (SR-P: 6GF3420-0AA40)

## Options

### DI/DO

Use cable „Power supply DIO RS232“ + distribution frame instead of adapting cable  
 10 m = 6GF3440-8BA2  
 30 m = 6GF3440-8BA4

### Web Interface

Use additional IE cable  
 Various lengths available  
 2 m = 6XV1871-5TH20

### Optional



**Lens**  
 6 mm (6GF3420-0AC00-0LK0)  
 16 mm (6GF3420-0AC00-1LK0)



**Lights**  
 red (6GF3420-0AC00-1LT0)  
 infrared (6GF3420-0AC00-3LT0)

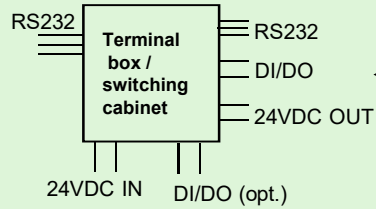
### Support

Mounting bracket  
 6GF3420-0AC00-1AA0

## Serial RS232



Simple text based protocol



1 Reader per COM port may be connected  
 RS 232 cable for MV420 (open wires)  
 10 m = 6GF3440-8BA2  
 30 m = 6GF3440-8BA4

## Reader

With external power supply



**MV420 complete**  
 6 mm lens, red light  
 (SR-B: 6GF3420-0AA20)  
 (SR-P: 6GF3420-0AA40)

## Options

### DI/DO

Wires included in RS232 / power supply cable  
 Open wires

### Web Interface

Use additional IE cable  
 Various lengths available  
 2 m = 6XV1871-5TH20

### Support

Mounting bracket  
 6GF3420-0AC00-1AA0

### Optional



#### Lens

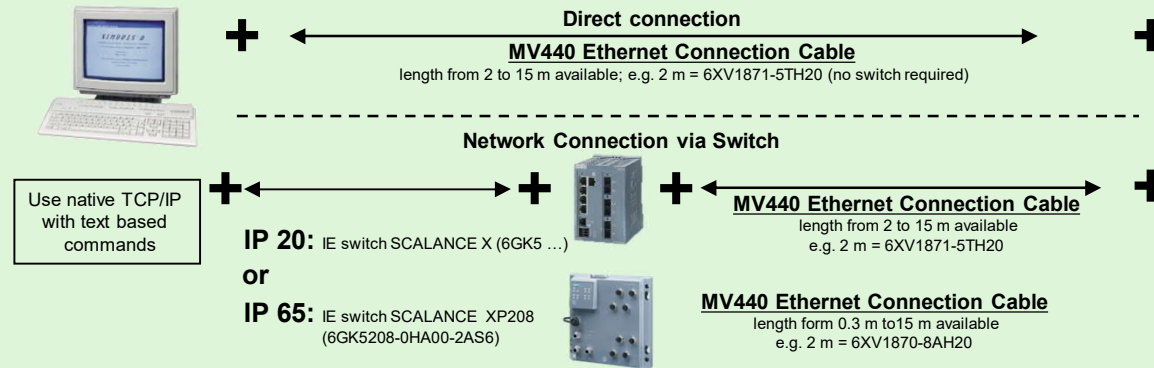
6 mm  
 (6GF3420-0AC00-0LK0)  
 16 mm  
 (6GF3420-0AC00-1LK0)



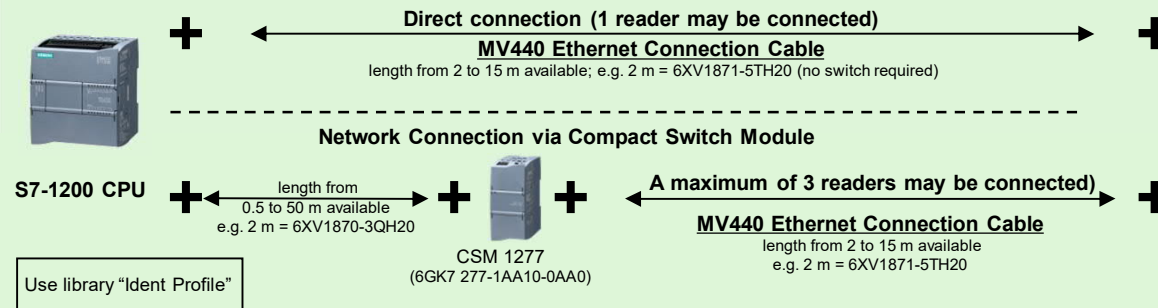
#### Lights

red  
 (6GF3420-0AC00-1LT0)  
 infrared  
 (6GF3420-0AC00-3LT0)

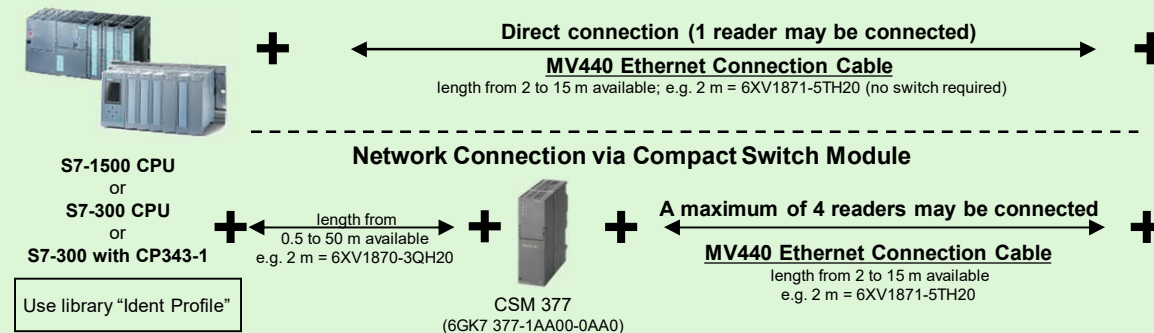
## Ethernet TCP/IP



## S7-1200 via Industrial Ethernet or PROFINET



## S7-300/1500 via Industrial Ethernet or PROFINET



## Reader

With external power supply



### MV440

SR; 640 x 480 pixel:  
 (6GF3440-1CD10)  
 HR; 1024 x 768 pixel:  
 (6GF3440-1GE10)  
 UR; 1600 x 1200 pixel:  
 (6GF3440-1LE10)



### Lens

6 mm (6GF9001-1BB01)  
 8.5 mm \*\* (6GF9001-1BE01)  
 12 mm (6GF9001-1BL01)  
 16 mm (6GF9001-1BF01)  
 25 mm (6GF9001-1BG01)  
 35 mm (6GF9001-1BH01)  
 50 mm (6GF9001-1BJ01)  
 75 mm \*\* \*\*\* (6GF9001-1BK01)



### Lights build-in

red (6GF3440-8DA11)  
 white (6GF3440-8DA21)  
 green (6GF3440-8DA31)  
 infrared (6GF3440-8DA41)



### Lights external \*)

red (6GF3400-0LT01-8DA1)  
 infrared (6GF3400-0LT01-7BA1)



Cable adapter M16/M12 (6GF3440-8BD1)  
 Or  
 Cable M12/open wire (6GF3440-8BC4)



Mounting plate (6GF3440-8CD01)

### Cable for power supply

#### Open wires

10 m = 6GF3440-8BA2  
 30 m = 6GF3440-8BA4

#### or Push Pull

1.5 m = 6GF3400-0BH15  
 2 m = 6GF3400-1BH20

### Or Wide-Range power supply

#### EU connector

6GT2 898-0AA00

#### UK connector

6GT2 898-0AA10

#### US connector

6GT2 898-0AA20

#### 5 m cable for 24 V

6GT2 891-0PH50

\*) Additional power supply needed

\*\*) not in combination with build-in lights;

\*\*\*) for protection order additional the tube extension 6GF3440-8AC13

## Options

### D/DO \*)

Wires included in power supply cable „Open wires“

### Software

Text-Genius  
 6GF3400-0SL01  
 Text-Genius Plus  
 6GF3400-1SL01  
 Veri-Genius  
 6GF3400-0SL02  
 Pat-Genius  
 6GF3400-0SL03

### Support

Mounting plate  
 6GF3440-8CA  
 Tri-plate  
 6GF9002-7AD

### Opt. for Lens rings

0.5, 1, 5, 10, 20, 40 mm  
 6GF9001-1BU  
 0.5, 1 mm  
 6GF9001-1BU01  
 length doubler  
 6GF9001-1BV

### Filter

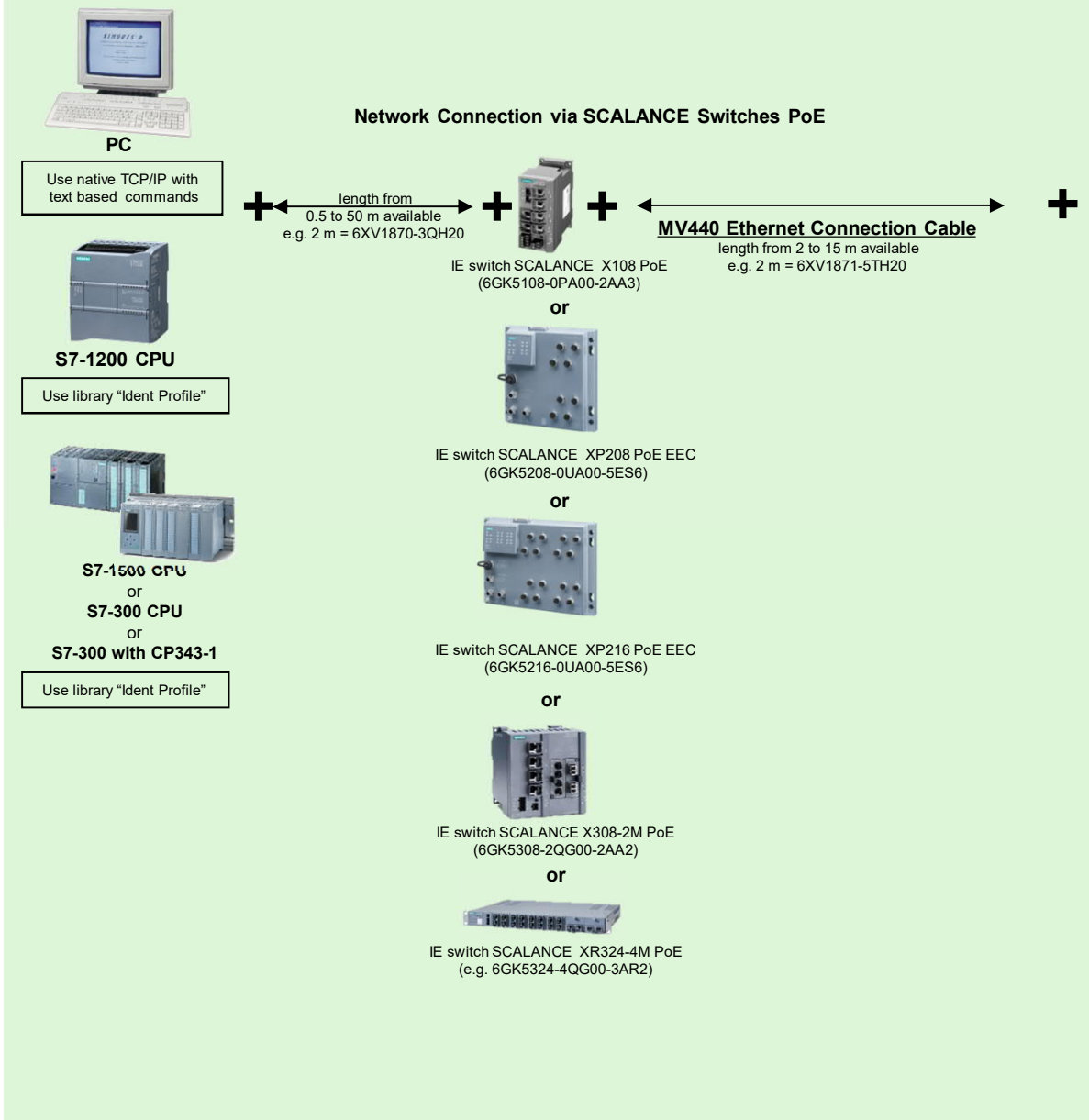
infrared  
 6GF9001-2AD  
 blue  
 6GF9001-2AE  
 polarization  
 6GF9001-2AF  
 6GF3440-8CX3  
 daylight  
 6GF3440-8EA1

### Protective lens cover

metal glas  
 6GF3440-8AC11  
 metal plastic  
 6GF3440-8AC21  
 plastic (included in basic model)  
 6GF3440-8AC12



## Ethernet TCP/IP or PROFINET (PoE)



## Reader

With power supply over Ethernet (PoE)

- 
- Lens**
    - 6 mm (6GF9001-1BB01)
    - 8.5 mm (\*\*)
    - 12 mm (6GF9001-1BE01)
    - 16 mm (6GF9001-1BL01)
    - 25 mm (6GF9001-1BF01)
    - 35 mm (6GF9001-1BG01)
    - 50 mm (6GF9001-1BH01)
    - 75 mm (\*\*\*)
    - 75 mm (\*\*\*)
    - 75 mm (\*\*\*)
  - Lights build-in**
    - red (6GF3440-8DA11)
    - white (6GF3440-8DA21)
    - green (6GF3440-8DA31)
    - infrared (6GF3440-8DA41)
  - Lights external \*)**
    - red (6GF3400-0LT01-8DA1)
    - infrared (6GF3400-0LT01-7BA1)
  - Filter**
    - infrared (6GF9001-2AD)
    - blue (6GF9001-2AE)
    - polarization (6GF9001-2AF)
    - daylight (6GF3440-8CX3)
    - daylight (6GF3440-8EA1)
  - Mounting plate** (6GF3440-8CD01)
  - Cable adapter M16/M12** (6GF3440-8BD1) Or **Cable M12/open wire** (6GF3440-8BC4)

**MV440**  
SR; 640 x 480 pixel: (6GF3440-1CD10)  
HR; 1024 x 768 pixel: (6GF3440-1GE10)  
UR; 1600 x 1200 pixel: (6GF3440-1LE10)

## Options

- DI/DO \*)**  
„Power supply DIO RS232“  
10 m = 6GF3440-8BA2  
30 m = 6GF3440-8BA4
- Software**  
Text-Genius  
6GF3400-0SL01  
Text-Genius Plus  
6GF3400-1SL01  
Veri-Genius  
6GF3400-0SL02  
Pat-Genius  
6GF3400-0SL03
- Support**  
Mounting plate  
6GF3440-8CA  
Tri-plate  
6GF9002-7AD
- Opt. for Lens rings**  
0.5, 1, 5, 10, 20, 40 mm  
6GF9001-1BU  
0.5, 1 mm  
6GF9001-1BU01  
length doubler  
6GF9001-1BV
- Filter**  
infrared (6GF9001-2AD)  
blue (6GF9001-2AE)  
polarization (6GF9001-2AF)  
daylight (6GF3440-8CX3)  
daylight (6GF3440-8EA1)
- Protective lens cover**  
metal glas  
6GF3440-8AC11  
metal plastic  
6GF3440-8AC21  
plastic (included in basic model)  
6GF3440-8AC12

## SIMATIC PLC

### S7-1200



**RF120C**  
6GT2 002-0LA00

A maximum of 1 reader may be connected  
**RF120C to MV440**

2 m = 6GT2 091-4LH20  
5 m = 6GT2 091-4LH50  
10 m = 6GT2 091-4LN10

adapting cable:  
2 m = 6GF3420-0AC00-2CB0

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

## SIMATIC PLC

### S7-300 Rack or S7-400 via ET 200M (DP-V1/PN-IO)



**ASM 475 + Front connector**  
(6GT2 002-0GA10) + (6ES7 392-1AJ00-0AA0)

**Accessories:**  
Connecting element (6ES7 390-5AA00-0AA0)  
Terminal element (6ES7 390-5BA00-0AA0)

A maximum of 2 readers may be connected  
**ASM 475 to MV440**

2 m = 6GT2 891-4EH20  
5 m = 6GT2 891-4EH50

adapting cable:  
2 m = 6GF3420-0AC00-2CB0

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

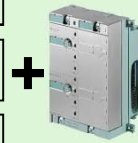
## ET 200pro via PROFIBUS or PROFINET or S7 PLC

ET 200pro PROFIBUS DP-V1  
Interface module

ET 200pro PROFINET  
Interface module

ET 200pro PROFINET  
CPU module

Up to 9 x 170C  
modules per  
ET 200pro rack



**RF170C**  
Communication module  
(6GT2002-0HD01)  
Connection block  
(6GT2002-1HD01)

A maximum of 2 readers may be connected  
**RF170C to MV440**

Extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

adapting cable:  
2 m = 6GF3420-0AC00-2CB

## PROFIBUS

**ECOFAST Connection Block**  
(6ES7 194-3AA00-0AA0)  
With Connector for adjusting  
PROFIBUS address  
(6ES7 194-1KB00-0XA0)  
or  
**M12 Connection Block**  
(6ES7 194-3AA00-0BA0)



**ASM 456 (DP-V1)**  
Communication Module  
(6GT2 002-0ED00)

**RF160C (DP-V0)**  
Communication Module  
(6GT2 002-0EF00)

A maximum of 2 readers may be connected  
**ASM 456/ RF160C to MV440**

Extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

adapting cable:  
2 m = 6GF3420-0AC00-2CB0

## Reader

powered through connection cable



**Lens**  
6 mm  
(6GF9001-1BB01)  
8.5 mm \*\*  
(6GF9001-1BE01)  
12 mm  
(6GF9001-1BL01)  
16 mm  
(6GF9001-1BF01)  
25 mm  
(6GF9001-1BG01)  
35 mm  
(6GF9001-1BH01)  
50 mm  
(6GF9001-1BJ01)  
75 mm \*\*\*)  
(6GF9001-1BK01)



### MV440

SR; 640 x 480 pixel:  
(6GF3440-1CD10)  
HR; 1024 x 768 pixel:  
(6GF3440-1GE10)  
UR; 1600 x 1200 pixel:  
(6GF3440-1LE10)



**Lights build-in**  
red  
(6GF3440-8DA11)  
white  
(6GF3440-8DA21)  
green  
(6GF3440-8DA31)  
infrared  
(6GF3440-8DA41)



**Lights external \*)**  
red  
(6GF3400-0LT01-8DA1)  
infrared  
(6GF3400-0LT01-7BA1)

+

Cable adapter M16/M12  
(6GF3440-8BD1)  
Or  
Cable M12/open wire  
(6GF3440-8BC4)

+

Mounting plate  
(6GF3440-8CD01)

\*) Additional power supply needed  
\*\*) not in combination with build-in lights;  
\*\*\*) for protection order additional the tube  
extension 6GF3440-8AC13

## Options

DI/DO \*)

„Power supply  
DIO RS232“

10 m = 6GF3440-8BA2  
30 m = 6GF3440-8BA4

**Software**

Text-Genius  
6GF3400-0SL01  
Text-Genius Plus  
6GF3400-1SL01  
Veri-Genius  
6GF3400-0SL02  
Pat-Genius  
6GF3400-0SL03

**Web Interface**

Use additional IE cable  
Various lengths available  
2 m = 6XV1871-5TH20

**Support**

Mounting plate  
6GF3440-8CA  
Tri-plate  
6GF9002-7AD

**Opt. for Lens  
rings**

0.5, 1, 5, 10, 20, 40 mm  
6GF9001-1BU  
0.5, 1 mm  
6GF9001-1BU01  
length doubler  
6GF9001-1BV

**Filter**

infrared  
6GF9001-2AD  
blue  
6GF9001-2AE  
polarization  
6GF9001-2AF  
6GF3440-8CX3  
daylight  
6GF3440-8EA1

**Protective  
lens cover**

metal glas  
6GF3440-8AC11  
metal plastic  
6GF3440-8AC21  
plastic (included in  
basic model)  
6GF3440-8AC12

# MV440 System Interfaces

## PROFINET & OPC UA

### Communication Modules



A maximum of  
**1 reader at RF185C,**  
**2 readers at RF186C/CI,**  
**4 readers at RF188C/CI**  
**of MV440 may be connected**

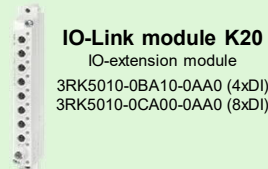
2 m = 6GT2 891-4FH20    5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10    20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

### Additional IOs



**RF18xCI to sensor**  
 1.5 m = 3RK1902-4PB15-3AA0  
 5 m = 6GT2 891-4MH50  
 10 m = 6GT2 891-4MN10

Reader connector 90° angled:  
 2 m = 6GT2 891-4JH20    5 m = 6GT2 891-4JH50  
 10 m = 6GT2 891-4JN10



Or one  
**Standard sensor**

Or one  
**Actor**

## Ethernet TCP/IP



Ethernet TP cable through switch. See Page 75 for RF182C Cabling/ Connectors



A maximum of **2 readers** may be connected  
**RF182C to MV440**

Extension cables:    +    adapting cable:  
 2 m = 6GT2 891-4FH20    2 m = 6GF3420-0AC00-2CB0  
 5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10  
 20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 Push Pull RJ45 (6GT2 002-2JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

Computers and non Siemens PLCs

## Ethernet/IP

**RFID 181EIP**  
 Communication Module (6GT2 002-0JD20)



A maximum of **2 readers** may be connected  
**RFID 1801EIP to MV440**

Extension cables:    +    adapting cable:  
 2 m = 6GT2 891-4FH20    2 m = 6GF3420-0AC00-2CB0  
 5 m = 6GT2 891-4FH50  
 10 m = 6GT2 891-4FN10  
 20 m = 6GT2 891-4FN20  
 50 m = 6GT2 891-4FN50

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

## Reader

powered through connection cable



### Lens

6 mm (6GF9001-1BB01)  
 8.5 mm \*\* (6GF9001-1BE01)  
 12 mm (6GF9001-1BL01)  
 16 mm (6GF9001-1BF01)  
 25 mm (6GF9001-1BG01)  
 35 mm (6GF9001-1BH01)  
 50 mm (6GF9001-1BJ01)  
 75 mm \*\* \*\*\* (6GF9001-1BK01)



### MV440

SR; 640 x 480 pixel: (6GF3440-1CD10)  
 HR; 1024 x 768 pixel: (6GF3440-1GE10)  
 UR; 1600 x 1200 pixel: (6GF3440-1LE10)



### Lights build-in

red (6GF3440-8DA11)  
 white (6GF3440-8DA21)  
 green (6GF3440-8DA31)  
 infrared (6GF3440-8DA41)



### Lights external \*)

red (6GF3400-0LT01-8DA1)  
 infrared (6GF3400-0LT01-7BA1)

Cable adapter M16/M12 (6GF3440-8BD1)  
 Or  
 Cable M12/open wire (6GF3440-8BC4)

Mounting plate (6GF3440-8CD01)

\*) Additional power supply needed  
 \*\*) not in combination with build-in lights;  
 \*\*\*) for protection order additional the tube extension 6GF3440-8AC13

## Options

### D1/DO \*)

„Power supply DIO RS232“

10 m = 6GF3440-8BA2  
 30 m = 6GF3440-8BA4

### Software

Text-Genius 6GF3400-0SL01  
 Text-Genius Plus 6GF3400-1SL01  
 Veri-Genius 6GF3400-0SL02  
 Pat-Genius 6GF3400-0SL03

### Web Interface

Use additional IE cable  
 Various lengths available  
 2 m = 6XV1871-5TH20

### Support

Mounting plate 6GF3440-8CA  
 Tri-plate 6GF9002-7AD

### Opt. for Lens rings

0.5, 1, 5, 10, 20, 40 mm  
 6GF9001-1BU  
 0.5, 1 mm 6GF9001-1BU01  
 length doubler 6GF9001-1BV

### Filter

infrared 6GF9001-2AD  
 blue 6GF9001-2AE  
 polarization 6GF9001-2AF  
 6GF3440-8CX3  
 daylight 6GF3440-8EA1

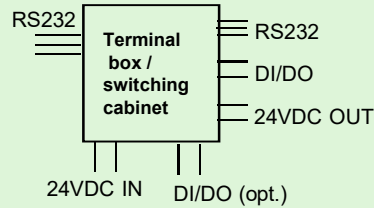
### Protective lens cover

metal glas 6GF3440-8AC11  
 metal plastic 6GF3440-8AC21  
 plastic (included in basic model) 6GF3440-8AC12

## Serial RS232



Simple text based protocol



1 Reader per COM port may be connected  
**RS 232 cable for MV440 (open wires)** +  
 10 m = 6GF3440-8BA2  
 30 m = 6GF3440-8BA4

## Reader

With external power supply



### Lens

- 6 mm (6GF9001-1BB01)
- 8.5 mm \*\* (6GF9001-1BE01)
- 12 mm (6GF9001-1BL01)
- 16 mm (6GF9001-1BF01)
- 25 mm (6GF9001-1BG01)
- 35 mm (6GF9001-1BH01)
- 50 mm (6GF9001-1BJ01)
- 75 mm \*\* (6GF9001-1BK01)



### MV440

- SR; 640 x 480 pixel: (6GF3440-1CD10)
- HR; 1024 x 768 pixel: (6GF3440-1GE10)
- UR; 1600 x 1200 pixel: (6GF3440-1LE10)



### Lights build-in

- red (6GF3440-8DA11)
- white (6GF3440-8DA21)
- green (6GF3440-8DA31)
- infrared (6GF3440-8DA41)



### Lights external \*)

- red (6GF3400-0LT01-8DA1)
- infrared (6GF3400-0LT01-7BA1)



Cable adapter M16/M12 (6GF3440-8BD1)

Or

Cable M12/open wire (6GF3440-8BC4)



Mounting plate (6GF3440-8CD01)

\*) Additional power supply needed  
 \*\*) not in combination with build-in lights;  
 \*\*\*) for protection order additional the tube extension 6GF3440-8AC13

## Options

### DI/DO \*)

Wires included in RS232 / power supply cable  
 Open wires

### Software

- Text-Genius 6GF3400-0SL01
- Text-Genius Plus 6GF3400-1SL01
- Veri-Genius 6GF3400-0SL02
- Pat-Genius 6GF3400-0SL03

### Web Interface

Use additional IE cable  
 Various lengths available  
 2 m = 6XV1871-5TH20

### Support

- Mounting plate 6GF3440-8CA
- Tri-plate 6GF9002-7AD

### Opt. for Lens rings

- 0.5, 1, 5, 10, 20, 40 mm 6GF9001-1BU
- 0.5, 1 mm 6GF9001-1BU01
- length doubler 6GF9001-1BV

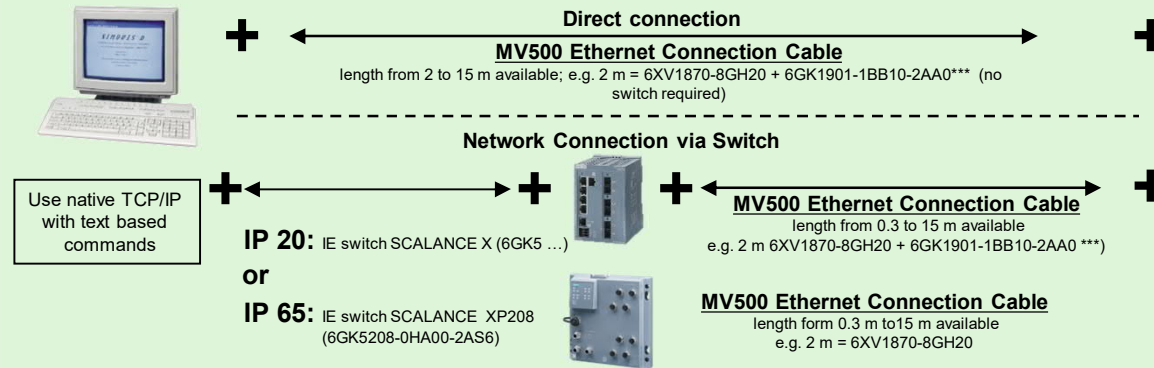
### Filter

- infrared 6GF9001-2AD
- blue 6GF9001-2AE
- polarization 6GF9001-2AF
- 6GF3440-8CX3 daylight 6GF3440-8EA1

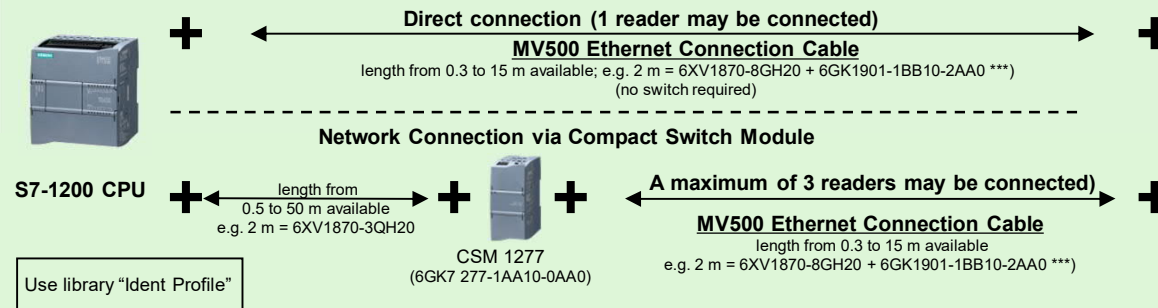
### Protective lens cover

- metal glass 6GF3440-8AC11
- metal plastic 6GF3440-8AC21
- plastic (included in basic model) 6GF3440-8AC12

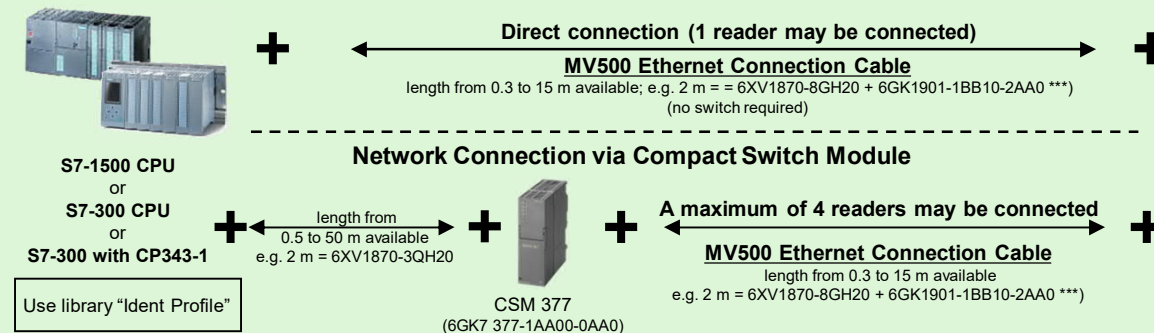
## Ethernet TCP/IP



## S7-1200 via Industrial Ethernet or PROFINET



## S7-300/1500 via Industrial Ethernet or PROFINET



\*\*\*) Custom assembly necessary; use the correct stripping tool

## Reader

With external power supply



### MV540

S; 800 x 600 pixel:  
 (6GF3540-0CD10)  
 H; 1280 x 1024 pixel:  
 (6GF3540-0GE10)

### MV550

S; 800 x 600 pixel:  
 (6GF3550-0CD10)  
 H; 1280 x 1024 pixel:  
 (6GF3550-0GE10)

### MV560

U; 1920 x 1200 pixel:  
 (6GF3560-0LE10)  
 X; 2592 x 2048 pixel:  
 (6GF3560-0HE10)

### Protective lens cover

metal glass  
 basic  
 6GF3540-8AC11  
 long  
 6GF3540-8AC12

### Cable for power supply

**Open wires**  
 10 m = 6GF3500-8BA21  
 30 m = 6GF3500-8BA41

OR

### Power supply

**EU connector**  
 6GT2 898-0AA00

**UK connector**  
 6GT2 898-0AA10

**US connector**  
 6GT2 898-0AA20

**cable for 24 V**  
 5 m = 6GT2 891-0PH50  
 +  
 50 cm = 6GF3500-8BA11  
 5 m = 6GF3500-8BA12

\*\* not in combination with build-in lights;  
 \*\*\*\* use long version of protective lens cover

- Lens**
- 6 mm (6GF9001-1BB01)
  - 8.5 mm \*\* (6GF9001-1BE01)
  - 12 mm (6GF9001-1BL01)
  - 16 mm (6GF9001-1BF01)
  - 25 mm (6GF9001-1BG01)
  - 35 mm (6GF9001-1BH01)
  - 50 mm (6GF9001-1BJ01)
  - 75 mm \*\* (6GF9001-1BK01)

- E-Fokus lens**
- 25mm (6GF3540-8EA03-0LL0)

- Lights build-in**
- red basic (6GF3540-8DA11)
  - red multi (6GF3540-8DA13)
  - white multi (6GF3540-8DA33)
  - infrared basic (6GF3540-8DA41)

- Lights external**
- red (6GF3400-0LT01-8DA1)
  - infrared (6GF3400-0LT01-7BA1)
  - + adapter M12/M12 (6GF3500-8BD10)
  - + Mounting plate (6GF3440-8CD01)

## Options

DO

Wires included in power supply cable „Open wires“

**Support**

Mounting plate 6GF3440-8CA  
 Tri-plate 6GF9002-7AD

**Opt. for Lens**

**Rings**

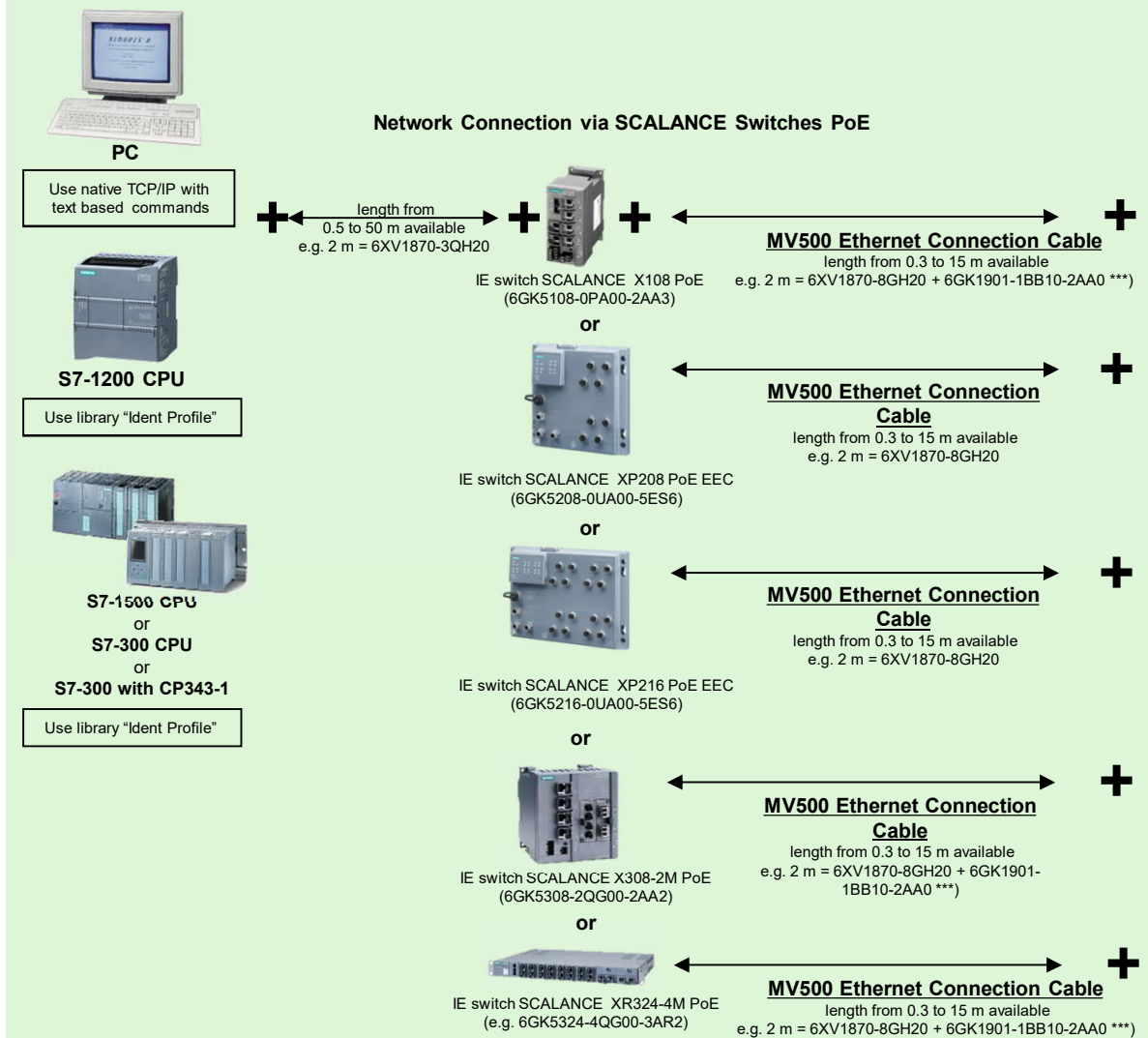
0.5, 1, 5, 10, 20, 40 mm  
 6GF9001-1BU  
 0.5, 1 mm  
 6GF9001-1BU01  
 length doubler  
 6GF9001-1BV

**Filter**

daylight 6GF3440-8EA1



## Ethernet TCP/IP or PROFINET (PoE): 100MB



\*\*\*) Custom assembly necessary; use the correct stripping tool

## Reader

With power supply over Ethernet (PoE)



### MV540

S; 800 x 600 pixel:  
(6GF3540-0CD10)  
H; 1280 x 1024 pixel:  
(6GF3540-0GE10)

### MV550

S; 800 x 600 pixel:  
(6GF3550-0CD10)  
H; 1280 x 1024 pixel:  
(6GF3550-0GE10)

### MV560

U; 1920 x 1200 pixel:  
(6GF3560-0LE10)  
X; 2592 x 2048 pixel:  
(6GF3560-0HE10)

### Protective lens cover

metal glass  
basic  
6GF3540-8AC11  
long  
6GF3540-8AC12



### Lens

6 mm  
(6GF9001-1BB01)  
8.5 mm \*\*)  
(6GF9001-1BE01)  
12 mm  
(6GF9001-1BL01)  
16 mm  
(6GF9001-1BF01)  
25 mm  
(6GF9001-1BG01)  
35 mm  
(6GF9001-1BH01)  
50 mm  
(6GF9001-1BJ01)  
75 mm \*\* \*\*\*)  
(6GF9001-1BK01)



### E-Fokus lens

25mm  
(6GF3540-8EA03-0LL0)



### Lights build-in

red basic  
(6GF3540-8DA11)  
red multi  
(6GF3540-8DA13)  
white multi  
(6GF3540-8DA33)  
infrared basic  
(6GF3540-8DA41)

## Options

### DO

Additional cable for DO-supply is needed

10 m = 6GF3500-8BA21  
30 m = 6GF3500-8BA41

### Support

Mounting plate  
6GF3440-8CA  
Tri-plate  
6GF9002-7AD

### Opt. for Lens

#### Rings

0.5, 1, 5, 10, 20, 40 mm  
6GF9001-1BU  
0.5, 1 mm  
6GF9001-1BU01  
length doubler  
6GF9001-1BV

#### Filter

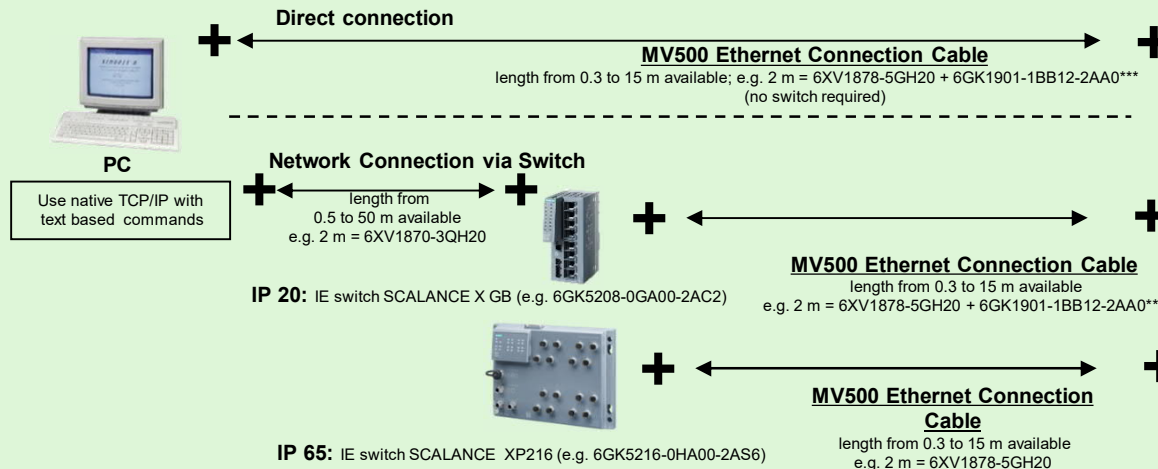
daylight  
6GF3440-8EA1

\*\* ) not in combination with build-in lights;  
\*\*\*\* ) use long version of protective lens cover

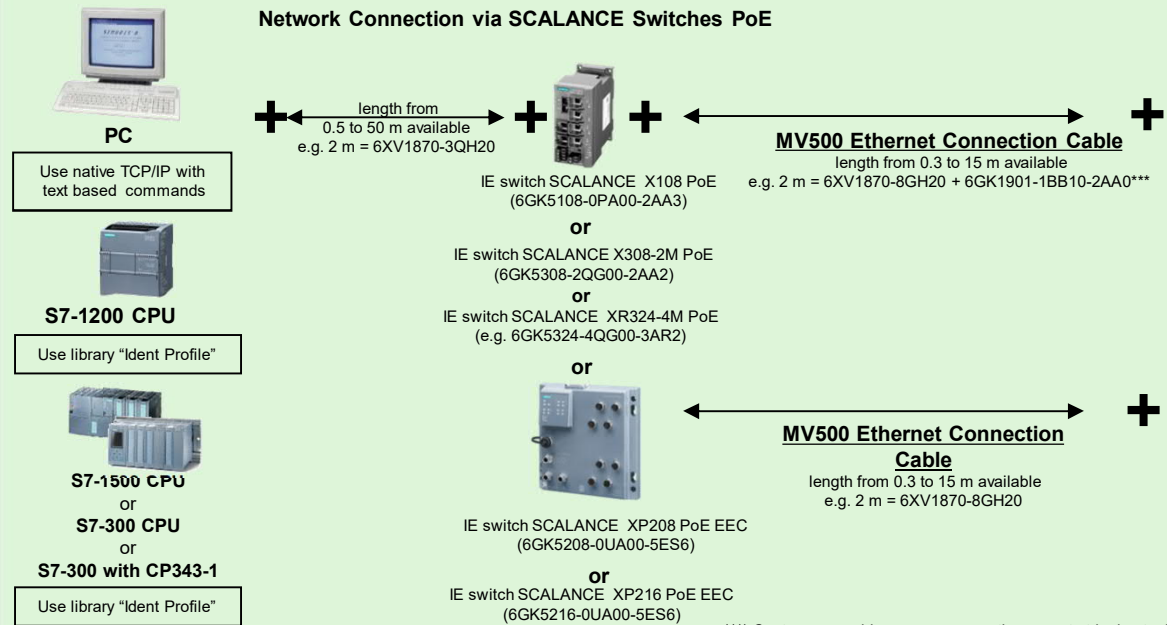


## Two parallel Networks on one Device: 1000MB + 100MB

### 1000MB / GigE Network, no PoE needed



### 100 MB / Profinet Network, Switch with PoE



## Reader

With power supply over Ethernet (PoE)



### MV550

S; 800 x 600 pixel:  
 (6GF3550-0CD10)  
 H; 1280 x 1024 pixel:  
 (6GF3550-0GE10)

### MV560

U; 1920 x 1200 pixel:  
 (6GF3560-0LE10)  
 X; 2592 x 2048 pixel:  
 (6GF3560-0HE10)



### Lens

6 mm  
 (6GF9001-1BB01)  
 8.5 mm \*\*)  
 (6GF9001-1BE01)  
 12 mm  
 (6GF9001-1BL01)  
 16 mm  
 (6GF9001-1BF01)  
 25 mm  
 (6GF9001-1BG01)  
 35 mm  
 (6GF9001-1BH01)  
 50 mm  
 (6GF9001-1BJ01)  
 75 mm \*\*)  
 (6GF9001-1BK01)



### E-Fokus lens

25mm  
 (6GF3540-8EA03-0LL0)



### Lights build-in

red basic  
 (6GF3540-8DA11)  
 red multi  
 (6GF3540-8DA13)  
 white multi  
 (6GF3540-8DA33)  
 infrared basic  
 (6GF3540-8DA41)

### Protective lens cover

metal glass  
 basic  
 6GF3540-8AC11  
 long  
 6GF3540-8AC12

## Options

### DO

Additional cable for DO-supply is needed

10 m = 6GF3500-8BA21  
 30 m = 6GF3500-8BA41

### Support

Mounting plate  
 6GF3440-8CA  
 Tri-plate  
 6GF9002-7AD

### Opt. for Lens

#### Rings

0.5, 1, 5, 10, 20, 40 mm  
 6GF9001-1BU  
 0.5, 1 mm  
 6GF9001-1BU01  
 length doubler  
 6GF9001-1BV

#### Filter

daylight  
 6GF3440-8EA1

\*\* not in combination with build-in lights;  
 \*\*\*\* use long version of protective lens cover

## SIMATIC PLC S7-1200



**RF120C**  
6GT2 002-0LA00

A maximum of 1 reader may be connected  
**RF120C to MV500**

adapting cable:  
50 cm = 6GF3500-8BA11 + 5 m = 6GT2 091-4LH20  
5 m = 6GF3500-8BA12 10 m = 6GT2 091-4LH50  
5 m = 6GT2 091-4LN10

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

## SIMATIC PLC S7-300 Rack or S7-400 via ET 200M (DP-V1/PN-IO)



**ASM 475 + Front connector**  
(6GT2 002-0GA10) + (6ES7 392-1AJ00-0AA0)

**Accessories:**  
Connecting element (6ES7 390-5AA00-0AA0)  
Terminal element (6ES7 390-5BA00-0AA0)

A maximum of 2 readers may be connected  
**ASM 475 to MV500**

adapting cable:  
50 cm = 6GF3500-8BA11 + 2 m = 6GT2 891-4EH20  
5 m = 6GF3500-8BA12 5 m = 6GT2 891-4EH50

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

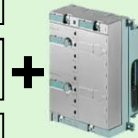
## ET 200pro via PROFIBUS or PROFINET or S7 PLC

ET 200pro PROFIBUS DP-V1  
Interface module

ET 200pro PROFINET  
Interface module

ET 200pro PROFINET  
CPU module

Up to 9 x 170C  
modules per  
ET 200pro rack



**RF170C**  
Communication module  
(6GT2002-0HD01)  
Connection block  
(6GT2002-1HD01)

A maximum of 2 readers may be connected  
**RF170C to MV500**

adapting cable:  
50 cm = 6GF3500-8BA11 (+)  
5 m = 6GF3500-8BA12

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

## PROFIBUS

**ECOFAST Connection Block**  
(6ES7 194-3AA00-0AA0)

**With Connector for adjusting  
PROFIBUS address**  
(6ES7 194-1KB00-0XA0)

**M12 Connection Block**  
(6ES7 194-3AA00-0BA0)



**ASM 456 (DP-V1)**  
Communication Module  
(6GT2 002-0ED00)

**RF160C (DP-V0)**  
Communication Module  
(6GT2 002-0EF00)

A maximum of 2 readers may be connected  
**ASM 456/ RF160C to MV500**

adapting cable:  
50 cm = 6GF3500-8BA11 (+)  
5 m = 6GF3500-8BA12

And extension cables:  
2 m = 6GT2 891-4FH20  
5 m = 6GT2 891-4FH50  
10 m = 6GT2 891-4FN10  
20 m = 6GT2 891-4FN20  
50 m = 6GT2 891-4FN50

## Reader

Powered through connection cable



### MV540

S; 800 x 600 pixel:  
(6GF3540-0CD10)  
H; 1280 x 1024 pixel:  
(6GF3540-0GE10)

### MV550

S; 800 x 600 pixel:  
(6GF3550-0CD10)  
H; 1280 x 1024 pixel:  
(6GF3550-0GE10)

### MV560

U; 1920 x 1200 pixel:  
(6GF3560-0LE10)  
X; 2592 x 2048 pixel:  
(6GF3560-0HE10)



### Lens

6 mm  
(6GF9001-1BB01)  
8.5 mm \*\*)  
(6GF9001-1BE01)  
12 mm  
(6GF9001-1BL01)  
16 mm  
(6GF9001-1BF01)  
25 mm  
(6GF9001-1BG01)  
35 mm  
(6GF9001-1BH01)  
50 mm  
(6GF9001-1BJ01)  
75 mm \*\*) \*\*\*\*)  
(6GF9001-1BK01)



### E-Fokus lens

25mm  
(6GF3540-8EA03-0LL0)



### Lights build-in

red basic  
(6GF3540-8DA11)  
red multi  
(6GF3540-8DA13)  
white multi  
(6GF3540-8DA33)  
infrared basic  
(6GF3540-8DA41)

### Protective lens cover

metal glass  
basic  
6GF3540-8AC11  
long  
6GF3540-8AC12

## Options

### Support

Mounting plate  
6GF3440-8CA  
Tri-plate  
6GF9002-7AD

### Opt. for Lens

**Rings**  
0.5, 1, 5, 10, 20, 40 mm  
6GF9001-1BU  
0.5, 1 mm  
6GF9001-1BU01  
length doubler  
6GF9001-1BV

### Filter

daylight  
6GF3440-8EA1

\*\* not in combination with  
build-in lights;  
\*\*\*\* use long version of  
protective lens cover

# MV500 System Interfaces

## PROFINET & OPC UA

### Communication Modules



**RF185C** (6GT2 002-0JE10) **RF186C** (6GT2 002-0JE20) **RF188C** (6GT2 002-0JE40)

A maximum of  
**1 reader at RF185C,**  
**2 readers at RF186C/CI,**  
**4 readers at RF188C/CI**  
 of MV500 may be connected

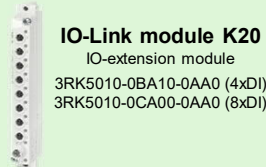
adapting cable: (+) 50 cm = 6GF3500-8BA11 5 m = 6GF3500-8BA12  
 And extension cables: 2 m = 6GT2 891-4FH20 5 m = 6GT2 891-4FH50 10 m = 6GT2 891-4FN10 20 m = 6GT2 891-4FN20 50 m = 6GT2 891-4FN50

### Additional IOs



**RF186CI** (6GT2 002-0JE50) **RF188CI** (6GT2 002-0JE60)

**RF18xCI to sensor**  
 1.5 m = 3RK1902-4PB15-3AA0  
 5 m = 6GT2 891-4MH50  
 10 m = 6GT2 891-4MN10



**IO-Link module K20**  
 IO-extension module  
 3RK5010-0BA10-0AA0 (4xDI)  
 3RK5010-0CA00-0AA0 (8xDI)

Or one  
**Standard sensor**  
 Or one  
**Actor**

## Ethernet TCP/IP



Ethernet TP cable through switch. See Page 75 for RF182C Cabling/ Connectors



**RF182C**  
 Communication Module (6GT2 002-0JD10)

A maximum of 2 readers may be connected  
**RF182C to MV040**

adapting cable: (+) 50 cm = 6GF3500-8BA11 5 m = 6GF3500-8BA12  
 And extension cables: 2 m = 6GT2 891-4FH20 5 m = 6GT2 891-4FH50 10 m = 6GT2 891-4FN10 20 m = 6GT2 891-4FN20 50 m = 6GT2 891-4FN50

Computers and non Siemens PLCs

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 Push Pull RJ45 (6GT2 002-2JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

## Ethernet/IP

**RFID 181EIP**  
 Communication Module (6GT2 002-0JD20)



A maximum of 2 readers may be connected  
**RFID 181EIP to MV040**

adapting cable: (+) 50 cm = 6GF3500-8BA11 5 m = 6GF3500-8BA12  
 And extension cables: 2 m = 6GT2 891-4FH20 5 m = 6GT2 891-4FH50 10 m = 6GT2 891-4FN10 20 m = 6GT2 891-4FN20 50 m = 6GT2 891-4FN50

**Connection Blocks:**  
 M12, 7/8" – 5 pole power (6GT2 002-1JD00)  
 M12, 7/8" – 4 pole power (6GT2 002-4JD00)

## Reader

Powered through connection cable



### MV540

S; 800 x 600 pixel: (6GF3540-0CD10)  
 H; 1280 x 1024 pixel: (6GF3540-0GE10)

### MV550

S; 800 x 600 pixel: (6GF3550-0CD10)  
 H; 1280 x 1024 pixel: (6GF3550-0GE10)

### MV560

U; 1920 x 1200 pixel: (6GF3560-0LE10)  
 X; 2592 x 2048 pixel: (6GF3560-0HE10)

### Protective lens cover

metal glass  
 basic 6GF3540-8AC11  
 long 6GF3540-8AC12



**Lens**  
 6 mm (6GF9001-1BB01)  
 8.5 mm \*\* (6GF9001-1BE01)  
 12 mm (6GF9001-1BL01)  
 16 mm (6GF9001-1BF01)  
 25 mm (6GF9001-1BG01)  
 35 mm (6GF9001-1BH01)  
 50 mm (6GF9001-1BJ01)  
 75 mm \*\* \*\*\*\* (6GF9001-1BK01)



**E-Fokus lens**  
 25mm (6GF3540-8EA03-0LL0)



**Lights build-in**  
 red basic (6GF3540-8DA11)  
 red multi (6GF3540-8DA13)  
 white multi (6GF3540-8DA33)  
 infrared basic (6GF3540-8DA41)



**Lights external \*)**  
 red (6GF3400-0LT01-8DA1)  
 infrared (6GF3400-0LT01-7BA1)

+ adapter M12/M12 (6GF3500-8BD10)  
 + Mounting plate (6GF3440-8CD01)

\*) only with RF185C, RF186C/CI, RF188C/CI  
 \*\*) not in combination with build-in lights;  
 \*\*\*\*) use long version of protective lens cover

## Options

### Support

Mounting plate 6GF3440-8CA  
 Tri-plate 6GF9002-7AD

### Opt. for Lens

#### Rings

0.5, 1, 5, 10, 20, 40 mm  
 6GF9001-1BU  
 0.5, 1 mm  
 6GF9001-1BU01  
 length doubler  
 6GF9001-1BV

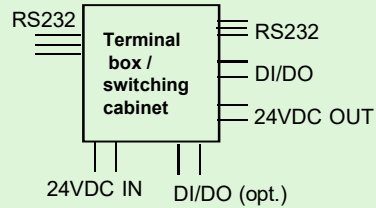
#### Filter

daylight  
 6GF3440-8EA1

## Serial RS232



Simple text based protocol



1 Reader per COM port may be connected  
**RS 232 cable for MV500 (open wires)** +  
 10 m = 6GF3500-8BA21  
 30 m = 6GF3500-8BA41

## Reader

With external power supply



### MV540

S; 800 x 600 pixel:  
 (6GF3540-0CD10)  
 H; 1280 x 1024 pixel:  
 (6GF3540-0GE10)

### MV550

S; 800 x 600 pixel:  
 (6GF3550-0CD10)  
 H; 1280 x 1024 pixel:  
 (6GF3550-0GE10)

### MV560

U; 1920 x 1200 pixel:  
 (6GF3560-0LE10)  
 X; 2592 x 2048 pixel:  
 (6GF3560-0HE10)

### Protective lens cover

metal glass  
 basic  
 6GF3540-8AC11  
 long  
 6GF3540-8AC12



### Lens

6 mm  
 (6GF9001-1BB01)  
 8.5 mm \*\*  
 (6GF9001-1BE01)  
 12 mm  
 (6GF9001-1BL01)  
 16 mm  
 (6GF9001-1BF01)  
 25 mm  
 (6GF9001-1BG01)  
 35 mm  
 (6GF9001-1BH01)  
 50 mm  
 (6GF9001-1BJ01)  
 75 mm \*\* \*\*\*\*  
 (6GF9001-1BK01)



### E-Fokus lens

25mm  
 (6GF3540-8EA03-0LL0)



### Lights build-in

red basic  
 (6GF3540-8DA11)  
 red multi  
 (6GF3540-8DA13)  
 white multi  
 (6GF3540-8DA33)  
 infrared basic  
 (6GF3540-8DA41)



### Lights external

red  
 (6GF3400-0LT01-8DA1)  
 infrared  
 (6GF3400-0LT01-7BA1)



Cable M12/open wire  
 (10 m = 6GF3440-8BC4)



Mounting plate  
 (6GF3440-8CD01)

\*\* ) not in combination with build-in lights;  
 \*\*\*\* ) use long version of protective lens cover

## Options

### DO

Wires included in power supply cable „Open wires“

### Support

Mounting plate  
 6GF3440-8CA  
 Tri-plate  
 6GF9002-7AD

### Opt. for Lens

#### Rings

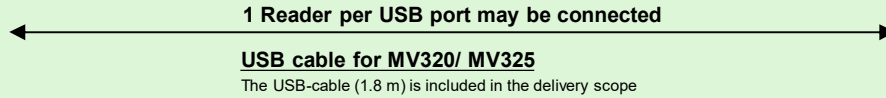
0.5, 1, 5, 10, 20, 40 mm  
 6GF9001-1BU  
 0.5, 1 mm  
 6GF9001-1BU01  
 length doubler  
 6GF9001-1BV

#### Filter

daylight  
 6GF3440-8EA1

# MV320, MV325 System Interfaces

## PC via USB



### Reader

Powered through USB-cable

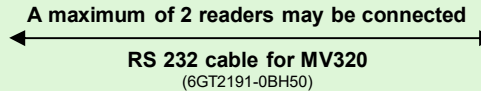
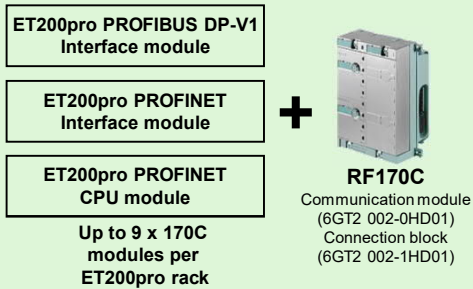
**MV320**  
(6GF3320-0HT01)

**MV325 with Docking station**  
(6GF3325-0HT01)

### Options

**Docking station for MV325**  
(6GF3325-0AC03)

## RF170C ET200pro via PROFIBUS or PROFINET or S7 PLC



### Reader

Powered through connection cable

**MV320**  
(6GF3320-0HT01)

**Spare Battery for MV325**  
(6GF3325-0AC07)

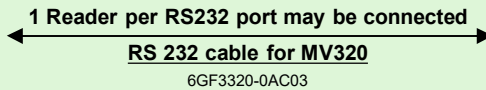
## RS232 For SIMATIC and other PLC



+



**CM PtP RS 232 BA**  
(6ES7540-1AD00-0AA0)



**power supply**

**Europe**  
(6GF3020-0AC40-0AP2)

**US**  
(6GF3020-0AC40-0AP1)

### Reader

With external power supply

**MV320**  
(6GF3320-0HT01)

**Metal stand for MV320**  
(6GF3320-0AC07)

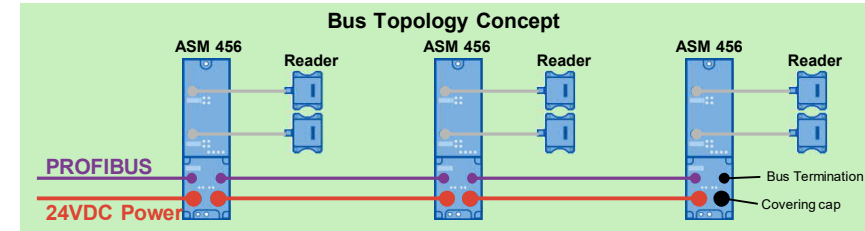


# ASM 456 Bill of Materials Guide



The ASM 456 is a PROFIBUS DP-V1 interface module that can have one of two Connecting Blocks plugged into it: either ECOfast block (shown on the left in the photo) or the M12 block (shown on the right in the photo). Note that if an M12 block is chosen, a separate power supply cable with 7/8" connector must be included to power the block. After selecting a connector module, the designer chooses whether to purchase pre-made network cables or to make his/her own. Note that another design consideration is whether the ASM 456 is a PROFIBUS end-node or not. If it is an end-node, a Termination Resistor is required.

Description	Part Number	Notes
ASM456 Base	6GT2 002-0ED00	For PROFIBUS DP-V1 networks. 2 read/write devices or readers can be connected
<b>Choose the Connecting Block type</b>		
M12-7/8" Connecting Block	6ES7 194-3AA00-0BA0	M12 connectors as opposed to the ECOfast type. Both types are available for the ASM 456
ECOfast Connecting Block	6ES7 194-3AA00-0AA0	ECOfast connectors as opposed to the M12 type. Both types are available for the ASM 456
<b>Make your own M12 PROFIBUS connection cables</b>		
PROFIBUS M12 connector plug (5 per pack) with socket insert	6GK1 905-0EB00	For the supply side of the PROFIBUS network. Use Termination Resistor on the 2nd M12 port if ASM 456 is an end node
PROFIBUS M12 connector plug (5 per pack) with pin insert	6GK1 905-0EA00	For loop-through side of the PROFIBUS network. Both ports are used. No Termination Resistor needed for that ASM 456
POFIBUS standard non-assembled cable	6XV1 830-0EH10	Sold by the meter Minimum length 20 m Maximum length 10000 m
M12 Termination Resistor for PROFIBUS (5 per pack)	6GK1 905-0EC00	Required if ASM 456 is an end-node
<b>Use pre-made M12 PROFIBUS connection cables</b>		
PROFIBUS cable with pre-assembled M12 connectors	6XV1 830-3Dxxx*	See Online Mall ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) Lengths available from 0.5 m up to 15 m
M12 Termination Resistor for PROFIBUS (5 per pack)	6GK1 905-0EC00	Required if ASM 456 is an end-node
<b>Make your own ECOfast PROFIBUS connection cables</b>		
PROFIBUS ECOfast connector plug (5 per pack) with socket insert	6GK1 905-0CB00	For the supply side of the PROFIBUS network. Use Termination Resistor on the 2nd ECOfast port if ASM 456 is an end node
PROFIBUS ECOfast connector plug (5 per pack) with pin insert	6GK1 905-0CA00	For loop-through side of the PROFIBUS network. Both ports are used. No Termination Resistor needed for that ASM 456
ECOfast Hybrid (both power and comm.) non-assembled cable	6XV1 830-7AN20 6XV1 830-7AN50 6XV1 830-7AT10	Sold by the meter (6XV1 830-7AH10) Or 20 m (-7AN20), 50 m (-7AN50), 100 m (-7AT10)
ECOfast Termination Resistor for PROFIBUS (1 per pack)	6GK1 905-0DA10	Required if ASM 456 is an end-node
<b>Use pre-made ECOfast PROFIBUS connection cables</b>		
PROFIBUS cable with pre-assembled ECOfast connectors	6XV1 830-7Bxxx*	See Online Mall ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) Lengths available from 0.5m up to 50m



Description	Part Number	Notes
<b>Make your own 7/8" power supply connection cables</b>		
Power cable (5 wire, trailing type)	6XV1 830-8AH10	For the supply side of the 24VDC power; from 20 m up to 1000 m
Connector plug 7/8" for voltage (5 per pack) with socket insert	6GK1 905-0FB00	For the supply side of the 24VDC power (required for M12 connection blocks only)
Connector plug 7/8" for voltage (5 per pack) with pin insert	6GK1 905-0FA00	For the loop- trough of 24VDC power (required for M12 connection blocks only)
<b>Use pre-made 7/8" power supply connection cables</b>		
Cable for supply voltage with pre-assembled 7/8" connectors	6XV1 822-5Bxxx*	See Online Mall ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) Lengths available from 0.5 m up to 15 m
<b>Make your own ASM 456 to RF reader cables</b>		
Refer to the Bulk cable and connectors tables (Pages 76- 77)		
<b>Use pre-made ASM 456 to RF reader cables</b>		
Reader cable R200/ RF300/ RF600/ MV440 and 6GT2 602-0AB10-0AX0 or Extension cable for RF200/ RF300/ RF600/ MV400 /MV500	6GT2 891-4FH20	2 meter pre-assembled cable
	6GT2 891-4FH50	5 meter pre-assembled cable
	6GT2 891-4FN10	10 meter pre-assembled cable
	6GT2 891-4FN20	20 meter pre-assembled cable
	6GT2 891-4FN50	50 meter pre-assembled cable
Reader cable MV420	6GF3420-0AC00-2CB0	2 meter pre-assembled cable
Reader cable MV500	6GF3500-8BA11	0.5 meter pre-assembled cable
	6GF3500-8BA12	5 meter pre-assembled cable
<b>Additional components</b>		
Covering caps for unused M12 (reader and network) ports	3RX9 802-0AA00	1 pack = 10 items
Covering caps for unused 7/8" (24VDC power) ports	6ES7 194-3JA00-0AA0	1 pack = 10 items
Connector for adjusting PROFIBUS address	6ES7 194-1KB00-0XA0	

\* These cables are available in various lengths (see catalogue or mall)

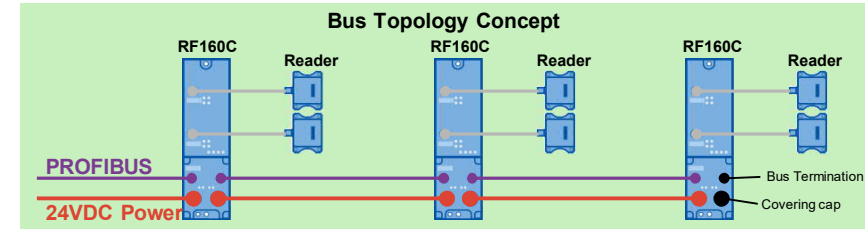


# RF160C Bill of Materials Guide



The RF160C is a PROFIBUS DP-V0 interface module that can have one of two Connecting Blocks plugged into it: either ECOfast block (shown on the left in the photo) or the M12 block (shown on the right in the photo). Note that if an M12 block is chosen, a separate power supply cable with 7/8" connector must be included to power the block. After selecting a connector module, the designer chooses whether to purchase pre-made network cables or to make his/her own. Note that another design consideration is whether the RF160C is a PROFIBUS end-node or not. If it is an end-node, a Termination Resistor is required.

Description	Part Number	Notes
RF160C Base	6GT2 002-0EF00	For PROFIBUS DP-V0 networks. 2 read/write devices or readers can be connected
<b>Choose the Connecting Block type</b>		
M12-7/8" Connecting Block	6ES7 194-3AA00-0BA0	M12 connectors as opposed to the ECOfast type. Both types are available for the RF160C
ECOfast Connecting Block	6ES7 194-3AA00-0AA0	ECOfast connectors as opposed to the M12 type. Both types are available for the RF160C
<b>Make your own M12 PROFIBUS connection cables</b>		
PROFIBUS M12 connector plug (5 per pack) with socket insert	6GK1 905-0EB00	For the supply side of the PROFIBUS network. Use Termination Resistor on the 2nd M12 port if RF160C is an end node
PROFIBUS M12 connector plug (5 per pack) with pin insert	6GK1 905-0EA00	For loop-through side of the PROFIBUS network. Both ports are used. No Termination Resistor needed for that RF160C
POFIBUS standard non-assembled cable	6XV1 830-0EH10	Sold by the meter Minimum length 20 m Maximum length 10000 m
M12 Termination Resistor for PROFIBUS (5 per pack)	6GK1 905-0EC00	Required if RF160C is an end-node
<b>Use pre-made M12 PROFIBUS connection cables</b>		
PROFIBUS cable with pre-assembled M12 connectors	6XV1 830-3Dxxx*	See Online Mail ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) Lengths available from 0.5 m up to 15 m
M12 Termination Resistor for PROFIBUS (5 per pack)	6GK1 905-0EC00	Required if RF160C is an end-node
<b>Make your own ECOfast PROFIBUS connection cables</b>		
PROFIBUS ECOfast connector plug (5 per pack) with socket insert	6GK1 905-0CB00	For the supply side of the PROFIBUS network. Use Termination Resistor on the 2nd ECOfast port if RF160C is an end node
PROFIBUS ECOfast connector plug (5 per pack) with pin insert	6GK1 905-0CA00	For loop-through side of the PROFIBUS network. Both ports are used. No Termination Resistor needed for that RF160C
ECOfast Hybrid (both power and comm.) non-assembled cable	6XV1 830-7AN20 6XV1 830-7AN50 6XV1 830-7AT10	Sold by the meter (6XV1830-7AH10) Or 20 m (-7AN20), 50 m (-7AN50), 100 m (-7AT10)
ECOfast Termination Resistor for PROFIBUS (1 per pack)	6GK1 905-0DA10	Required if RF160C is an end-node
<b>Use pre-made ECOfast PROFIBUS connection cables</b>		
PROFIBUS cable with pre-assembled ECOfast connectors	6XV1 830-7Bxxx*	See Online Mail ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) Lengths available from 0.5m up to 50m



Description	Part Number	Notes
<b>Make your own 7/8" power supply connection cables</b>		
Power cable (5 wire, trailing type)	6XV1 830-8AH10	For the supply side of the 24VDC power; from 20 m up to 1000 m
Connector plug 7/8" for voltage (5 per pack) with socket insert	6GK1 905-0FB00	For the supply side of the 24VDC power (required for M12 connection blocks only)
Connector plug 7/8" for voltage (5 per pack) with pin insert	6GK1 905-0FA00	For the loop- trough of 24VDC power (required for M12 connection blocks only)
<b>Use pre-made 7/8" power supply connection cables</b>		
Cable for supply voltage with pre-assembled 7/8" connectors	6XV1 822-5Bxxx*	See Online Mail ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) Lengths available from 0.5 m up to 15 m
<b>Make your own RF160C to RF reader cables</b>		
Refer to the Bulk cable and connectors tables (Pages 76 - 77)		
<b>Use pre-made RF160C to RF reader cables</b>		
Reader cable R200/ RF300/ RF600/ MV440 and 6GT2 602-0AB10-0AX0 or Extension cable for RF200/ RF300/ MV400/ MV500	6GT2 891-4FH20	2 meter pre-assembled cable
	6GT2 891-4FH50	5 meter pre-assembled cable
	6GT2 891-4FN10	10 meter pre-assembled cable
	6GT2 891-4FN20	20 meter pre-assembled cable
	6GT2 891-4FN50	50 meter pre-assembled cable
Reader cable MV420	6GF3420-0AC00-2CB0	2 meter pre-assembled cable
Reader cable MV500	6GF3500-8BA11	0.5 meter pre-assembled cable
	6GF3500-8BA12	5 meter pre-assembled cable
<b>Additional components</b>		
Covering caps for unused M12 (reader and network) ports	3RX9 802-0AA00	1 pack = 10 items
Covering caps for unused 7/8" (24VDC power) ports	6ES7 194-3JA00-0AA0	1 pack = 10 items
Connector for adjusting PROFIBUS address	6ES7 194-1KB00-0XA0	

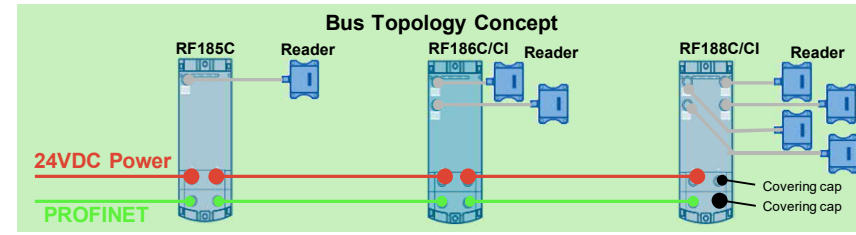
\* These cables are available in various lengths (see catalogue or mail)

# RF18xC /CI Bill of Materials Guide



The RF18xC is a PROFINET interface module that can connect to Ethernet-based networks via an M12 d-coded connector. A integrated switch enables star and line topologies. The module has L-coded M12 connectors for the 24 V power supply. The power can be transferred to additional loads at a second L-coded female connector. The L-coded connectors can transmit a continuous current of up to 16 A.

The designer chooses whether to purchase pre-made network cables or to make his/her own. Note that no Termination Resistors are required on end-nodes, but covering caps are highly recommended.



Description	Part Number	Notes
RF185C	6GT2 002-0JE10	1 read/write device or reader
RF186C	6GT2 002-0JE20	2 read/write devices or readers
RF188C	6GT2 002-0JE40	4 read/write devices or readers
RF186CI	6GT2 002-0JE50	2 read/write devices or readers plus sensors
RF188CI	6GT2 002-0JE60	4 read/write devices or readers plus sensors can be connected to PROFINET or Ethernet (OPC UA)
<b>Make your own M12 PROFINET connection cables</b>		
SIMATIC NET Ethernet M12 4-pin connector	6GK1 901-0DB10-6AA0	Ethernet to connection Block. 2 x M12 4-pin connectors needed if loop-through
RJ45 connector with metal casing and DC connection system, 180° cable outlet	6GK1 901-1BB10-2AA0	For connection into standard RJ45-type Ethernet switch
ETHERNET industrial cable 2x2, Type A, unassembled	6XV1 840-2AH10	Sold by the meter Minimum length 20 m; Maximum length 1000 m
<b>Use pre-made M12 PROFINET connection cables</b>		
Pre-assembled PROFINET cable with 4-pin M12 on both ends	6XV1 870-8xxx*	0.3 m – 15 m pre-assembled cable
<b>Make your own M12 L-coded power supply connection cables</b>		
Power cable (4 wire x 1.5 mm <sup>2</sup> , trailing type)	6XV1801-2B	For the supply side of the 24 VDC power, from 20m up to 1000m
M12 L-coded – male connector	6GK1906-0EA00	For the supply side of the 24 VDC power, screw joint for wires up to 1.5 mm <sup>2</sup>
M12 L-coded – female connector	6GK1906-0EB00	For the loop-through of 24 VDC power, screw joint for wires up to 1.5 mm <sup>2</sup>
<b>Use pre-made M12 L-coded power supply connection cables</b>		
Cable for supply voltage with pre-Assembled M12 L-coded connectors	6XV1801-6Dxxx	See Online Mall ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) Lengths available from 0.5 m up to 15 m

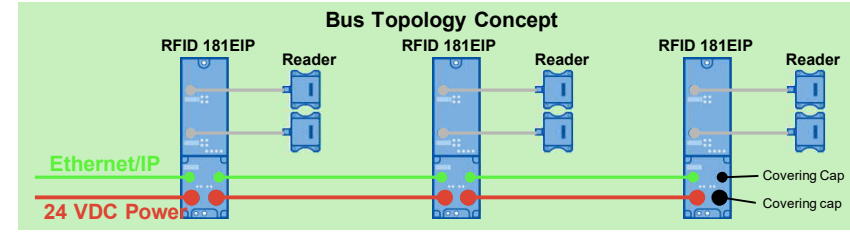
Description	Part Number	Notes
<b>Make your own RF18xC to RF reader cables</b>		
Refer to the Bulk cable and connectors tables (Pages 76 - 77)		
<b>Use pre-made RF18xC to RF reader cables</b>		
Reader cable R200/ RF300/ MV440 and 6GT2 602-0AB10-0AX0 or Extension cable for RF200/ RF300/ MV400 /MV500	6GT2 891-4FH20	2 meter pre-assembled cable
	6GT2 891-4FH50	5 meter pre-assembled cable
	6GT2 891-4FN10	10 meter pre-assembled cable
	6GT2 891-4FN20	20 meter pre-assembled cable
	6GT2 891-4FN50	50 meter pre-assembled cable
Reader cable MV420	6GF3420-0AC00-2CB0	2 meter pre-assembled cable
Reader cable MV500	6GF3500-8BA11	0.5 meter pre-assembled cable
	6GF3500-8BA12	5 meter pre-assembled cable
<b>Additional components</b>		
Covering caps for unused M12 ports	3RX9 802-0AA00	1 pack = 10 items
<b>Make your own M12 sensor cable (only RF18xC/CI variants)</b>		
M12 A-coded – male connector, 4 pin	6GK1 907-0DB10-6AA3	Sensor Connector at CM-side for cable diameter 6 – 8 mm
M12 A-coded – female connector, 4 pin	6GK1 907-0DC10-6AA3	Sensor-side connector for cable diameter 6 – 8 mm
Sensor cable	6GT2 090-4AN50*	Use any 3 wire cable, unshielded or shielded
M12 A-coded – male or female connector, 5 pin		Not available from Siemens Required for assembling an IO-Link port Class B cable
<b>Use pre-made M12 sensor cable (only RF18xC/CI variants)</b>		
IO-Link (port Class A) or sensor cable with M12 A-coded 4-pin connectors (male and female)	3RK1 902-4PB15-3AA0	1.5 meter pre-assembled sensor cable
	6GT2 891-4MH50	5 meter pre-assembled sensor cable
	6GT2 891-4MN10	10 meter pre-assembled sensor cable
IO-Link (port Class B), M12 A-coded 5-pin connectors		Not available from Siemens

\* These cables are available in various lengths (see catalogue or mall)

# RFID 181EIP Bill of Materials Guide



The RFID 181EIP is an Ethernet/IP (Rockwell protocol) interface module that can have one of two Connection Blocks plugged into it: either an M12-7/8" 5-pin Connection Block or an M12-7/8" 4-pin Connection Block plugged into it. This helps maintain its IP67 rating. Note that a separate power supply cable with 7/8" connector must be included to power the block. The designer chooses whether to purchase pre-made network cables or to make his/her own. Note that no Termination Resistors are required on end-nodes, but covering caps are highly recommended.



Description	Part Number	Notes
RFID 181EIP Base	6GT2 002-0JD20	For Ethernet/IP networks. 2 read/ write devices or readers can be connected
M12-7/8" (5-pin) Connecting Block	6GT2 002-1JD00	Connecting Block 4-pin M12 Ethernet, 5-pin 7/8" Power
M12-7/8" (4-pin) Connecting Block	6GT2 002-4JD00	Connecting Block 4-pin M12 Ethernet, 4-pin 7/8" Power
<b>Make your own M12 Ethernet/IP connection cables</b>		
SIMATIC NET Ethernet M12 4-pin connector	6GK1 901-0DB10-6AA0	Ethernet to Connection Block. 2 x M12 4-pin connectors needed if loop-through
RJ45 connector with metal casing and DC connection system, 180° cable outlet	6GK1 901-1BB10-2AA0	For connection into standard RJ45-type Ethernet switch
ETHERNET industrial cable 2x2, Type A, unassembled	6XV1 840-2AH10	Sold by the meter Minimum length 20 m Maximum length 1000 m
<b>Use pre-made M12 Ethernet/IP connection cables</b>		
Pre-assembled Ethernet cable with 4-pin M12 on both ends	6XV1 870-8xxx	0.3 m– 15 m pre-assembled cable
<b>Make your own 7/8" power supply connection cables with 5-pin plug</b>		
Power cable (5 wire, trailing type)	6XV1 830-8AH10	For the supply side of the 24VDC power from 20 m up to 1000 m
Connector plug 7/8" for voltage (5 per pack) with socket insert	6GK1 905-0FB00	For the supply side of the 24VDC power (For 5-pin 7/8" connection block only)
Connector plug 7/8" for voltage (5 per pack) with pin insert	6GK1 905-0FA00	For the loop-through of 24VDC power (For 5-pin 7/8" connection block only)
<b>Use pre-made 7/8" power supply connection cables with 5-pin plug</b>		
Cable for supply voltage with pre-assembled 7/8" connectors	6XV1 822-5Bxxx*	See Online Mall ( <a href="http://mall.automation.siemens.com">http://mall.automation.siemens.com</a> ) (For 5-pin 7/8" connection block only)
<b>Make your own 7/8" Power supply connection cables with 4-pin plug</b>		
Power cable (5 wire, trailing type)	6XV1 830-8AH10	For the supply side of the 24VDC power from 20 m up to 1000 m
Connector plug 7/8" for voltage with 4 socket insert	Not available from Siemens	See Note 4 on page 77: Binder sells 7/8" plugs. Their part No. 99 2442 12 04 fits to conn. block
<b>Use pre-made 7/8" power supply connection cables with 4-pin plug</b>		
Not available from Siemens.		

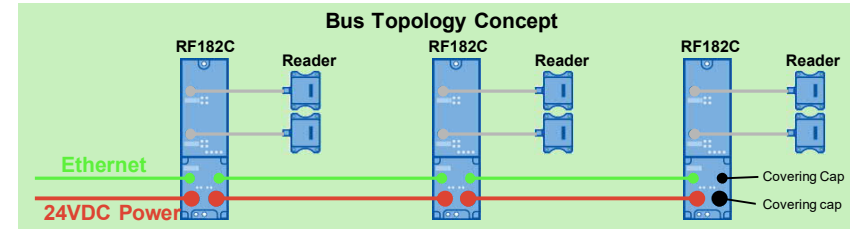
Description	Part Number	Notes
<b>Make your own RFID 181EIP to RF reader cables</b>		
Refer to the Bulk cable and connectors tables ( Pages 76 - 77 )		
<b>Use pre-made RFID 181EIP to RF reader cables</b>		
Reader cable R200/ RF300/ MV440 and 6GT2 602-0AB10-0AX0 or Extension cable for RF200/ RF300/, MV400/ MV500	6GT2 891-4FH20	2 meter pre-assembled cable
	6GT2 891-4FH50	5 meter pre-assembled cable
	6GT2 891-4FN10	10 meter pre-assembled cable
	6GT2 891-4FN20	20 meter pre-assembled cable
	6GT2 891-4FN50	50 meter pre-assembled cable
Reader cable MV420	6GF3420-0AC00-2CB0	2 meter pre-assembled cable
Reader cable MV500	6GF3500-8BA11	0.5 meter pre-assembled cable
	6GF3500-8BA12	5 meter pre-assembled cable
<b>Additional components</b>		
Covering caps for unused 7/8" (24VDC power) ports	6ES7 194-3JA00-0AA0	1 pack = 10 items
Covering caps for unused M12 ports	3RX9 802-0AA00	1 pack = 10 items

\* These cables are available in various lengths (see catalogue or mall)

# RF182C Bill of Materials Guide



The RF182C is a Ethernet TCP/IP interface module that can have one of three Connection Blocks plugged into it: either an M12-7/8" Connection Block or a Push Pull connection block plugged into it. This helps maintain its IP67 rating. Note that a separate power supply cable with 7/8" connector must be included to power the block. The designer chooses whether to purchase pre-made network cables or to make his/her own. Note that no Termination Resistors are required on end-nodes, but covering caps are highly recommended.



Description	Part Number	Notes
RF182C Base	6GT2 002-0JD10	For Ethernet networks. 2 read/write devices or readers can be connected
M12-7/8" (5-pin) Connecting Block	6GT2 002-1JD00	Connecting Block 4-pin M12 Ethernet, 5-pin 7/8" Power
Push-Pull Connecting Block	6GT2 002-2JD00	Connection Block RJ45 in IP 67
M12-7/8" (4-pin) Connecting Block	6GT2 002-4JD00	Connecting Block 4-pin M12 Ethernet, 4-pin 7/8" Power
<b>Make your own M12 Ethernet connection cables</b>		
SIMATIC NET Ethernet M12 4-pin connector	6GK1 901-0DB10-6AA0	Ethernet to Connection Block. 2x M12 4-pin connectors needed if loop-through
RJ45 connector with metal casing and DC connection system, 180° cable outlet	6GK1 901-1BB10-2AA0	For connection into standard RJ45-type Ethernet switch
ETHERNET industrial cable 2x2, Type A, unassembled	6XV1 840-2AH10	Sold by the meter Minimum length 20 m; Maximum length 1000 m
<b>Use pre-made M12 Ethernet connection cables</b>		
Pre-assembled PROFINET cable with 4-pin M12 on both ends	6XV1 870-8xxx*	0.3 m– 15 m pre-assembled cable
<b>Make your own Push Pull Ethernet connection cable</b>		
Push Pull RJ45 plug	6GK1 901-1BB10-6AA0	IP65 RJ45 connector
ETHERNET industrial cable 2x2, Type A, unassembled	6XV1 840-2AH10	Sold by the meter Minimum length 20 m; Maximum length 1000 m
<b>Use pre-made Push Pull Ethernet connection cables</b>		
At the moment not available from Siemens. Ask your Siemens distributor.		
<b>Make your own 7/8" power supply connection cables with 5-pin plug</b>		
Power cable (5 wire, trailing type)	6XV1 830-8AH10	For the supply side of the 24VDC power; from 20 m up to 1000 m
Connector plug 7/8" for voltage (5 per pack) with socket insert	6GK1 905-0FB00	For the supply side of the 24VDC power
Connector plug 7/8" for voltage (5 per pack) with pin insert	6GK1 905-0FA00	For the loop-through of 24VDC power
<b>Use pre-made 7/8" power supply connection cables with 5-pin plug</b>		
Cable for supply voltage with pre-assembled 7/8" connectors	6XV1 822-5Bxxx*	See Online Mall (Length 0.5 m to 15 m) ( <a href="http://mail.automation.siemens.com">http://mail.automation.siemens.com</a> )

\* These cables are available in various lengths (see catalogue or mall)

Description	Part Number	Notes
<b>Make your own Push Pull power supply connection cables</b>		
Power cable (5 wire, trailing type)	6XV1 830-8AH10	For the supply side of the 24 VDC power; from 20 m up to 1000 m
Push Pull Connector plug for 24VDC	6GK1 907-0AB10-6AA0	For the supply side of the 24 VDC power
<b>Use pre-made Push Pull power supply connection cables</b>		
At the moment not available from Siemens. Ask your Siemens distributor.		
<b>Make your own 7/8" power supply connection cables with 4-pin plug</b>		
Power cable (5 wire, trailing type)	6XV1 830-8AH10	For the supply side of the 24VDC power from 20 m up to 1000 m
Connector plug 7/8" for voltage With 4 socket insert	Not available from Siemens.	See Note 4 on page 77: Binder sells 7/8" plugs . Their part No. 99 2442 12 04 fits to conn. block
<b>Use pre-made 7/8" power supply connection cables with 4-pin plug</b>		
Not available from Siemens.		
<b>Make your own RF182C to RF reader cables</b>		
Refer to the Bulk cable and connectors tables (Pages 76 – 77)		
<b>Use pre-made RF182C to RF reader cables</b>		
Reader cable R200/ RF300/ MV440 and 6GT2 602-0AB10-0AX0 or Extension cable for RF200/ RF300/ RF600/ MV400 /MV500	6GT2 891-4FH20	2 meter pre-assembled cable
	6GT2 891-4FH50	5 meter pre-assembled cable
	6GT2 891-4FN10	10 meter pre-assembled cable
	6GT2 891-4FN20	20 meter pre-assembled cable
	6GT2 891-4FN50	50 meter pre-assembled cable
Reader cable MV420	6GF3420-0AC00-2CB0	2 meter pre-assembled cable
Reader cable MV500	6GF3500-8BA11	0.5 meter pre-assembled cable
	6GF3500-8BA12	5 meter pre-assembled cable
<b>Additional components</b>		
Covering caps for unused 7/8" (24VDC power) ports	6ES7 194-3JA00-0AA0	1 pack = 10 items
Covering caps for unused M12 ports	3RX9 802-0AA00	1 pack = 10 items
Covering caps for unused Push Pull power ports	6ES7194-4JA50-0AA0	1 pack = 5 items
Covering caps for unused Push Pull Ethernet ports	6ES7194-4JD50-0AA0	1 pack = 5 items

# Bulk Cable and Connectors



	ASM 456/ RF160C	RF120C	ASM 475	RS232 to PC	Ethernet to PC	RF170C	RF185C, RF186C/CI, RF188C/CI, RF182C, RFID 181EIP
<b>RF200</b>							
<b>RF2x0R (IO-Link)</b>	<b>For IP 20 Master with screws or push in:</b> Always use reader-side assembled cables: 1.5 m = 3RK1902-4HB15-5AA0; 5 m = 6GT2 891-4LH50; 10 m = 6GT2 891-4LN10 No further connector required				<b>For IP 67 Master with M12:</b> Use reader-side assembled cables: 1.5 m = 3RK1902-4HB15-5AA0; 5 m = 6GT2 891-4LH50; 10 m = 6GT2 891-4LN10 Connector for IO-Link Master: 3RK1902-4BA00-5AA0 (straight) or 3RK1902-4DA00-5AA0 (angled)		
<b>RF2X0R RF210M (RS422) (CM type)</b>	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 9-pin submin-D/M (CM connector) <sup>3</sup>	6GT2090-4AN50 (50 m cable) 6GT2090-4AT12 (120 m cable) 6GT2090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 20-pin S7-300 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) PC side: interface converter RS422/ RS232	Not applicable	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)
<b>RF240R RF250R RF260R RF290R (RS232)</b>	Not applicable	Not applicable	Not applicable	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2 490-1AA00 (PC connector)	Not applicable	Not applicable	Not applicable
<b>RF300</b>							
<b>RF3x0R (RS422) (CM type)</b>	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 9-pin submin-D/M (CM connector) <sup>3</sup>	6GT2090-4AN50 (50 m cable) 6GT2090-4AT12 (120 m cable) 6GT2090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 20-pin S7-300 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) PC side: interface converter RS422/ RS232	Not applicable	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)
<b>RF38xR (RS232)</b>	Not applicable	Not applicable	Not applicable	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2 490-1AA00 (PC connector)	Not applicable	Not applicable	Not applicable
<b>RF600</b>							
<b>RF650R</b>	Not applicable	Not applicable	Not applicable	Not applicable	6XV1 840-2AH10 (>20 m cable) 6GK1901-1BB10-2AA0 (RJ45, reader connector + network connector)	Not applicable	Not applicable
<b>RF610R/ RF615R/ RF680R/ RF685R</b>	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)	Not applicable	Not applicable	Not applicable	6XV1 840-2AH10 (>20 m cable) 6GK1901-0DB20-6AA0 (M12 Plug, reader connector) 6GK1901-1BB10-2AA0 (RJ45, network connector)	Not applicable	Not applicable

# Bulk Cable and Connectors



	ASM 456/ RF160C	RF120C	ASM 475	RS232 to PC	Ethernet to PC	RF170C	RF185C, RF186C/CI, RF188C/CI, RF182C, RFID 181EIP
<b>MV400 / MV500</b>							
<b>MV420</b>	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup> 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup> 9-pin submin-D/M (CM connector) <sup>3</sup>	6GT2 090-4AN50 (50 m cable) 6GT20 90-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup> 20-pin S7-300 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup> 6GT2 490-1AA00 (PC connector)	6XV1 840-2AH10 (>20 m) 6GK1 901-0DB20-6AA0 (4-pin M12 d coded, reader connector) 6GK1901-1BB10-2AA0 (RJ45, network connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup> 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup> 6GT2090-0BE00 (CM connector)
<b>MV440</b>	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 9-pin submin-D/M (CM connector) <sup>3</sup>	6GT2 090-4AN50 (50 m cable) 6GT20 90-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 20-pin S7-300 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup> 6GT2 490-1AA00 (PC connector)	6XV1 840-2AH10 (>20 m) 6GK1 901-0DB20-6AA0 (4-pin M12 d coded, reader connector) 6GK1901-1BB10-2AA0 (RJ45, network connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GT2090-0BE00 (CM connector)
<b>MV500</b>	Always use reader-side assembled cables: 10 m = 6GF3 500-8BA21 30 m = 6GF3 500-8BA41 6GT2090-0BE00 (CM connector)	Always use reader-side assembled cables: 10 m = 6GF3 500-8BA21 30 m = 6GF3 500-8BA41 9-pin submin-D/M (CM connector) <sup>3</sup>	Always use reader-side assembled cables: 10 m = 6GF3 500-8BA21 30 m = 6GF3 500-8BA41 20-pin S7-300 (CM connector)	Always use reader-side assembled cables: 10 m = 6GF3 500-8BA21 30 m = 6GF3 500-8BA41 6GT2 490-1AA00 (PC connector)	Always use reader-side assembled cables with 90° angled connector <b>100 MB:</b> 6XV1 870-8xxx (0.3 to 15 m) 6GK1 901-1BB10-2AA0 (RJ45, 2x2) 6GK1 901-0DB20-6AA0 (M12, 2x2) <b>1000 MB:</b> 6XV1 878-5Gxxx (0.3 to 15 m) 6GK1 901-1BB12-2AA0 (RJ45, 4x2) 6GK1 901-0DB30-6AA0 (M12, 4x2) The connectors (M12, RJ45) can be assembled after cutting one connector of an existing cable	Always use reader-side assembled cables: 10 m = 6GF3 500-8BA21 30 m = 6GF3 500-8BA41 6GT2090-0BE00 (CM connector)	Always use reader-side assembled cables: 10 m = 6GF3 500-8BA21 30 m = 6GF3 500-8BA41 6GT2090-0BE00 (CM connector)

## Power & Control-side Networking Components

	ASM 456/ RF160C	RF120C	ASM 475	RS232 to PC	RF185C, RF186C/CI, RF188C/CI, RF182C, RFID 181EIP	RF600	MV420, MV440	MV500
<b>Cable &amp; Connectors</b>	See ASM 456 / RF160C Bill of Materials Guide Page 71, 72	Direct with S7-1200 assembly	Direct in S7-300 rack or in ET 200M rack using IM153-2 Module	See individual readers above	See RF18xC, RF182C & RFID181EIP bill of materials guide page 73, 74, 75	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 6GT2090-0BD00 (reader connector) 6GK1907-0DB10-6AA3 (power supply)	6GT2 090-4AN50 (50 m cable) 6GT2 090-4AT12 (120 m cable) 6GT2 090-4AT80 (800 m cable) 12-pin M16/F (reader connector) <sup>4</sup>	Always use reader-side assembled cables (M12, 12pin) and power-side open ends: 10 m = 6GF3 500-8BA21 30 m = 6GF3 500-8BA41

Notes:

- Certain readers and interface modules (ie. SLG D1x, SLG D1xS) have a separate 24VDC supply connection, thus have an onboard male M12 power connector. As an alternative to using a pre-made cable with the Wide Range Power Supply, one could use a female M12 and appropriate 4-conductor cable (pins 1&4 = 0 VDC, pins 2&3 = 24 VDC) to power these components:  
(a) Female 4-pin connector (1 per pack) 6GT2 390-1AB00
  - Order via distributor for electronic components
  - Binder M12, M16 and 7/8" male & female connectors for making custom interface cables.. They almost have screw terminals inside of them for wire connections, so they're easy to build in the field.
- The contact info is:

Binder-USA – LP offices and warehouse 3903 Calle Tecate, Camarillo, CA93012 PHONE: (805) 437-9925 EMAIL: <a href="mailto:sales@binder-usa.com">mailto:sales@binder-usa.com</a> Web site = <a href="http://www.binder-usa.com">http://www.binder-usa.com</a>	Binder Europa Rötélstrasse 27 74172 Neckarsulm PHONE: ++49 (0) 71 32 - 325-0 EMAIL: <a href="mailto:vk@binder-connector.de">vk@binder-connector.de</a> Web site: <a href="http://www.binder-connector.de">http://www.binder-connector.de</a>	Binder Asia 南京江宁开发区诚信大道88号, 7号楼 PHONE: 025-83328591 EMAIL: <a href="mailto:mailto:binderj@binder-connector.cn">mailto:binderj@binder-connector.cn</a> Web site: <a href="http://www.binder-connector.cn">http://www.binder-connector.cn</a>
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<b>Binder Order example for RF68xR DI/DO/power/RS232 connector:</b> M16 cable connector 12-pin, female wire solder: 99 5630 00 12
<b>Binder Order example for 7/8" power cable connector:</b> 7/8" cable connector 4-pin, male with screws: 99 2443 12 04 7/8" cable connector 4-pin, female with screws: 99 2442 12 04