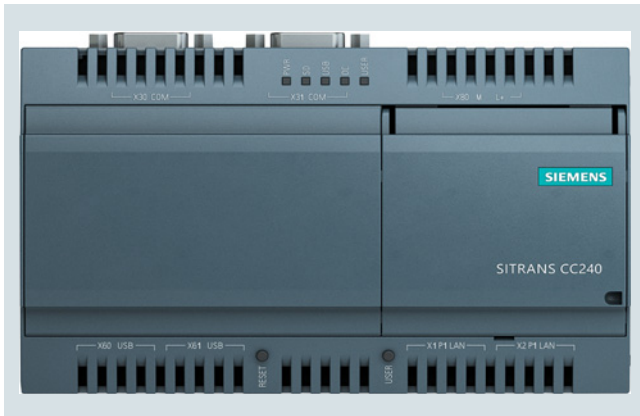


Digitalization and Communication

Communication

SITRANS CC240

Overview



SITRANS CC240 is the industrial gateway connecting HART devices (via SITRANS MX300 multiplexer) to the IT environment.

Benefits

- Reads out data from HART devices, including versions 5, 6, and 7.
- Reads data from existing installations or stand alone.
- Uses an onboard web application for configuration and asset monitoring purposes.
- Publishes data using OPC UA information model based on Namur Open Architecture.
- Publishes data to Siemens MindSphere using MindConnect Library.
- Publishes data via a .csv file export function.

Application

When used in combination with SITRANS MX300, SITRANS CC240 can:

- Establish a second data channel to existing installations to read out identification, diagnostic and configuration parameters.
- Provide data from process field devices to the IT environment using standard technologies such as OPC UA.
- Connect process field devices to Siemens Mindsphere, for example, to provide SITRANS store IQ with inventory management data.

Technical specifications

SITRANS CC240	
Installation type/mounting (characteristics)	
Design	IoT Gateway, built-in unit
Processor	
Processor type	Intel Quark X1020, 400 MHz
Drives	
Hard disk	1x microSD card slot; populated with 32 GB SDHC hosting OS and application
Memory	
Type of memory	DDR3-SDRAM
Main memory	1 GB RAM
Capacity of main memory max.	1 GB RAM
Ambient conditions	
Ambient temperature during operation	0 ... 50 °C (32 ... 122 °F)
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30
• Operation	5 ... 85 % at 30 °C (86 °F), (no condensation)
• Storage/transport	5 ... 95 % at 25 ... 55 °C (77 ... 131 °F), (no condensation)
Degree of protection	
• IP degree of protection	IP20
• IP degree of protection (at the front)	IP20
Design	
Dimensions (W x H x D)	144 x 90 x 53 mm (5.7 x 3.5 x 2.1 inch)
Material	
• Enclosure	<ul style="list-style-type: none"> Plastic enclosure Resistant to vibrations and shocks High electromagnetic compatibility, suitable for industrial environments.
Interfaces	
Ethernet interface	2 x LAN 10/100 Mbps Ethernet interface (RJ 45)
Serial interface	<ul style="list-style-type: none"> 1 x COM port RS 485, for connection to SITRANS MX300 multiplexor Sub-D9 connected to X30 interface
Integrated Functions	
Monitoring functions	
• Temperature monitoring	No
• Watchdog	Yes
• Status LEDs	Yes
• Fan	No

EMC¹⁾	
Interference immunity against discharge of static electricity	<ul style="list-style-type: none"> ± 4 kV contact discharge acc. to IEC 61000-4-2; ± 8 kV air discharge acc. to IEC 61000-4-2
Interference immunity against high-frequency electromagnetic fields	<ul style="list-style-type: none"> 10 V/m for 80 ... 1 000 MHz, 80 % AM acc. to IEC 61000-4-3 3 V/m for 1.4 ... 2 GHz, 80 % AM acc. to IEC 61000-4-3 1 V/m for 2 ... 2.7 GHz, 80 % AM acc. to IEC 61000-4-3 10 V for 150 kHz ... 80 MHz, 80 % AM acc. to IEC 61000-4-6
Interference immunity against high frequency radiation	
Interference immunity to cable-borne interference	
• Interference immunity on supply cables	<ul style="list-style-type: none"> ± 2 kV acc. to IEC 61000-4-4, burst ± 1 kV acc. to IEC 61000-4-5, surge symmetric ± 2 kV acc. to IEC 61000-4-5, surge asymmetric
• Interference immunity on signal cables > 30 m	± 2 kV acc. to IEC 61000-4-5, surge, length > 30 m
• Interference immunity on signal cables < 30 m	± 2 kV in accordance with IEC 61000-4-4, burst, length > 30 m
Interference immunity against voltage surge ²⁾	
• Asymmetric interference	± 2 kV acc. to IEC 61000-4-5, surge asymmetric
• Symmetric interference	± 1 kV acc. to IEC 61000-4-5, surge symmetric
Interference immunity to magnetic fields at 50 Hz	100 A/m; to IEC 61000-4-8
Emission of conducted and non-conducted interference	
• Interference emission via line/AC current cables	EN 61000-6-4:2007 +A1:2011
Supply Voltage	
Isolated power supply	24 V DC (9 ... 36 V)
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Certificates and approvals	
General	CE, UL, cUL _{US} , KC
EMC	CE, EN 61000-6-4:2007 +A1:2011, EN 61000-6-2:2005, EN 61000-6-3:2007 +A1:2011, EN 61000-6-1:2007
Operating systems	
Operating system	Yocto Linux
Application	SITRANS CC240 software application
Note: Operating system and SITRANS CC240 software are preinstalled.	

¹⁾ EMC standards meet immunity requirements for industrial environments.

²⁾ Using an external surge arrester is recommended. Please see SIMATIC IOT2040 Operating Instructions for more details:
<https://support.industry.siemens.com/cs/mdm/109741658?c=93713172491&lc=en-WW>.

Selection and ordering data Article No.

SITRANS CC240	7MP2200-1CC15-2AA0
The Industrial gateway that connects up to 8 SITRANS MX300 with up to 64 HART field devices.	