

Trainguard PTC OBU

Technical Datasheet

Trainguard PTC OBU is the heart of our PTC system and it beats with the rhythm of your daily train operation. Providing proven interoperability and the highest safety standards it is the first choice to set your locomotives on track towards federal mandate compliance.

The OBU uses the same SIL4 hardware platform that has been deployed in hundreds of installations of Trainguard ETCS and Trainguard MT. To meet all of the environmental requirements of American railroads, we wrap our proven hardware in a dust-proof, fan-free, conduction-cooled housing.

We understand PTC as the first step towards a computerized, highly automated and efficient way of freight train operation. Therefore our computer platforms provide sufficient reserves to run additional applications such as energy management or automatic train control. This makes the Trainguard PTC OBU a future-proof investment for the railway operation of tomorrow.

Benefits

- Full ITC-PTC compliance
- Standard 9 MCU housing
- Integrated wide-range, crank-proof power supply with ample headroom
- Conduction-cooled assembly: no fans or moving parts
- IP65 / NEMA-4 sealed for your toughest environment
- Built-in diagnostic display takes the guesswork out
- Designed-in expansion options

Answers for infrastructure and cities.



Trainguard PTC OBU



Retrofit concept with adapter and messaging server

Engineering flexibility

The Trainguard PTC OBU has been designed to work with a wide range of locomotive types. A large number of I/O lines and a rock-solid power supply allow for flexible integration concepts for virtually any kind of vehicle.

Maintenance made easy

Since the maintenance of modern train control systems should not demand a great deal of time and effort from its users, Siemens built the Trainguard PTC OBU around these maintenance paradigms:

- No periodic or scheduled maintenance required.

- The OBU is the Line Replaceable Unit. No swapping of boards in the field.

- A diagnostic display built into the OBU front panel eases installation, commissioning and maintenance.

Support after delivery

Siemens approaches projects as a solution-oriented partner. That means that Siemens will work with the customer after delivery until the solution is working to the customer's satisfaction. Siemens demonstrates this approach everyday in global and local train control projects with extensive support for approval, certification and interoperability.

Trainguard OBU Technical Data (Overview)

Electrical	Min	Nom	Max	Units
Input Voltage	14.4	74	154	VDC
Input Current	0.6	0.75	6.5	ADC
Analog Inputs, Non-Vital		8		Ch
Digital Inputs, Vital		16		Ch
Digital Inputs, Non-vital		32		Ch
Digital Outputs, Vital		4		Ch
Digital Outputs, Non-Vital		8		Ch
Serial I/O		6		Ports
Ethernet, 10/100		6		Ports
Wheel Speed Sensors	1	2	2	Ch
IKON Outputs		2		Ch
Mass Storage (SSD)	8	8	128	GB
CPU (Intel)		3		
Mechanical				
Dimensions	11.39" x 11.5" x 9.25" (9 MCU)			
Weight		41	44	Lbs
Mounting	NAS 622 or flange / wall bracket			
Environmental				
Operating Temperature	-40		158	° F
Dust and water ingress	IP65 / NEMA-4			
Shock / vibration		40 / 3		g

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 Printed in USA
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