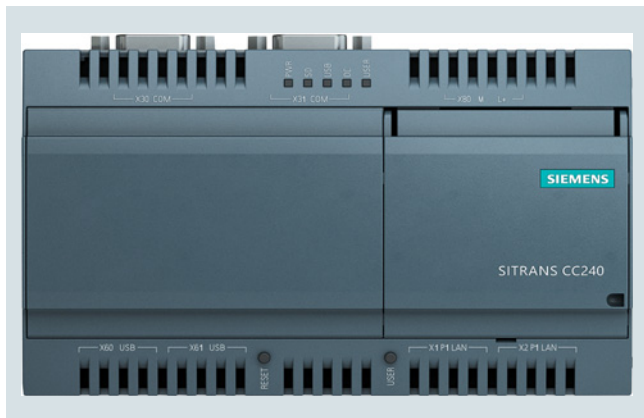


Digitalization and Communication

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		EMC ¹⁾
Installation type/mounting (characteristics)		Interference immunity against discharge of static electricity Interference immunity against high-frequency electromagnetic fields • Interference immunity against high frequency radiation
Design	IoT Gateway, built-in unit	
Processor		Interference immunity to cable-borne interference • Interference immunity on supply cables • Interference immunity on signal cables > 30 m • Interference immunity on signal cables < 30 m Interference immunity against voltage surge ²⁾ • Asymmetric interference • Symmetric interference Interference immunity to magnetic fields at 50 Hz Emission of conducted and non-conducted interference • Interference emission via line/AC current cables
Processor type	Intel Quark X1020, 400 MHz	
Drives		• ± 4 kV contact discharge acc. to IEC 61000-4-2; • ± 8 kV air discharge acc. to IEC 61000-4-2 • 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
Hard disk	1x microSD card slot; populated with 32 GB SDHC hosting OS and application	
Memory		• ± 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 ± 2 kV acc. to IEC 61000-4-5, surge, length > 30 m ± 2 kV in accordance with IEC 61000-4-4, burst, length > 30 m ± 2 kV acc. to IEC 61000-4-5, surge asymmetric ± 1 kV acc. to IEC 61000-4-5, surge symmetric 100 A/m; to IEC 61000-4-8
Type of memory	DDR3-SDRAM	
Main memory	1 GB RAM	EN 61000-6-4:2007 +A1:2011
Capacity of main memory max.	1 GB RAM	
Ambient conditions		Supply Voltage Isolated power supply 24 V DC (9 ... 36 V) Mains buffering • Mains/voltage failure stored energy time 5 ms
Ambient temperature during operation	0 ... 50 °C (32 ... 122 °F)	
Relative humidity	Tested according to IEC 60068-2-78, IEC 60068-2-30	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
• Operation	5 ... 85 % at 30 °C (86 °F), (no condensation)	
• Storage/transport	5 ... 95 % at 25 ... 55 °C (77 ... 131 °F), (no condensation)	Operating systems Operating system Yocto Linux Application SITRANS CC240 software application Note: Operating system and SITRANS CC240 software are preinstalled.
Degree of protection	IP20	
• IP degree of protection	IP20	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
• IP degree of protection (at the front)	IP20	
Design		Integrated Functions Monitoring functions • Temperature monitoring No • Watchdog Yes • Status LEDs Yes • Fan No
Dimensions (W x H x D)	144 x 90 x 53 mm (5.7 x 3.5 x 2.1 inch)	
Material	• Plastic enclosure • Resistant to vibrations and shocks • High electromagnetic compatibility, suitable for industrial environments.	Selection and ordering data Article No.
• Enclosure		
Interfaces		SITRANS CC240 7MP2200-1CC15-2AA0 The Industrial gateway that connects up to 8 SITRANS MX300 with up to 64 HART field devices.
Ethernet interface	2 x LAN 10/100 Mbps Ethernet interface (RJ 45)	
Serial interface	• 1 x COM port RS 485, for connection to SITRANS MX300 multiplexor • Sub-D9 connected to X30 interface	