A6500-CC System Communication Card

The ModBus and Rack Interface Module is designed for high reliability for the plant's most critical rotating machinery. It reads parameters from all AMS A6500 ATG modules and outputs these parameters through ModBus TCP/IP and/or ModBus RTU (serial). In addition, OPC UA is available for data transmission to third party systems.

This 1-slot monitor is used together with other AMS A6500 ATG monitors to build a complete API 670 machinery protection monitor. Applications include steam, gas, compressors, and hydro turbo machinery.

Operators are provided machinery health parameters in the control environment for seamless integration. The module powers local graphical displays at the protection rack for machine and instrumentation readout. Either ModBus TCP/IP or ModBus RTU or OPC UA can be configured, or for redundant path, can be used simultaneously.

Data Output		
RS 485	6 bus lines max. data rate	according to EIA485 standard 512 kbit
Ethernet	Connector	RJ45
	Data rate	10/100 Mbit
	Max. cable length	100m
	Voltage	2V peak-to-peak
	Rated current	100 mA
	Rated power	200 mW
USB	Connection socket	USB type B
	Data rate	12 Mbit/s
	Isolation	Interface is connected to earth
Modbus	RS 485	According to EIA485 standard
	Data rate	9600 or 19.2 kBaud
	Voltage	200 mV peak-to-peak
	Rated current	1.6 mA
	Rated power	0.4 mW

- ■ 3U size, 1-slot plug-in module decreases cabinet space requirements in half from traditional 6U size cards.
- ■ API 670 compliant, hot-swappable module.
- ■ Password protected user configuration.
- ■ Self-checking facilities include monitoring hardware, power input, and hardware temperature.

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Environmental, General	
Protection Class	IP20 IEC 60529
Operating Temperature	-20° to 70°C (-4° to 158°F)
Storage Temperature	-40° to 85°C (-40° to 185°F)
Relative Humidity	5 – 95%, non condensing
Vibration	IEC 60068-2-6 0.15mm, 10 – 55Hz 20m/s², 55 – 150Hz
EMC Resistance	IEC 61326-1
Power Consumption	Max. 4W
Configuration	Password protected
Rack Slot	3RU/4HP
Board Dimensions	PCB/EURO card format according to DIN 41494, 100 x 160mm (3.937 x 6.300in)
Weight	app 170g exclusive packaging

Compliance and Certifications	
CE	EMC – EN61326-1
	2014/30/EU
	2014/34/EU
	2011/65/EU
ATEX	EN 60079-0:2012
	EN 60079-15:2010
IEC-Ex	IEC 60079-0:2011; Edition: 6.0
	IEC 60079-15:2010; Edition: 4
CSA	CAN/CSA-C22.2 NO. 0-10
	CAN/CSA-C22.2 NO. 61010-1-12
	CAN/CSA-C22.2 NO. 60079-0:15
	CAN/CSA-C22.2 NO. 60079-15:12
	IEC 60529:2013 + COR2:2015
	UL 61010-1:12
	UL 60079-0:13
	UL 60079-15:13
Marine	DNV GL rules for classification – Ships and offshore units

Hazardous Area Approvals

Non-sparking nA in combination with nC	
ATEX	II 3G – Ex nA nC IIC Gc, -20°C ≤ Ts ≤ 70°C (with Ts ≤ 70°C the requirements for temperature class T4 are met)
IEC-Ex	II 3G – Ex nA nC IIC Gc, -20°C ≤ Ts ≤ 70°C (with Ts ≤ 70°C the requirements for temperature class T4 are met)
CSA	Class I Division 2, Groups A, B, C, D, T4 Class 1, Zone 2 Ex / AEx nA nC IIC T4 Gc (the ambient temperature within the end use enclosure shall not exceed 55°C)

Ordering Information

Model Number	Product Description
A6500-CC	SYSTEM COMMUNICATION CARD, MODBUS RTU/TCP, OPC UA

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