

A6500-CP System Communication Card Pro

The Rack Interface Module is designed for high performant connectivity to other devices, providing high frequent data updates at best possible security level for monitoring rotating equipment.

It reads parameters from all AMS A6500 ATG modules and outputs these parameters through ModBus TCP/IP, ModBus RTU (serial), OPC-UA and ATG View Mobile App.

In addition, the module is used for configuration of entire system and communication with AMS Machine Works Software for predictive analytics.

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.



| Physical | | |
|----------|----------------------------|---------------------------------------|
| RS 485 | 6 bus lines max. data rate | According to EIA485 standard 512 kbit |
| Ethernet | Connector | 2x 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 |

- 3U size, 1-slot plug-in module decreases cabinet space requirements in half from traditional 6U size cards.
- API 670 compliant, hot-swappable module.
- Physical Key-Lock
- State-of-the-Art User Management
- SNTP time synchronization
- Two physically separated Ethernet ports.
- Cyber Security Certification after IEC 62443



| | | |
|-------------------------------|---|--|
| 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 |
| Key Switch | At front panel, removable key (Enables/Disables configuration changes to rack) | |
| Data Interfaces | | |
| Ethernet Port I | Modbus RTU & Modbus TCP/IP | |
| | OPC-UA | |
| | Configuration Interface (AMS Machine Studio) | |
| | Prediction Data Interface (AMS Machine Works) | |
| | Internal Webserver for LiveView Dashboard | |
| | Mobile App (ATG View) | |
| Ethernet Port II | Modbus RTU & Modbus TCP/IP | |
| | OPC-UA | |
| | Internal Webserver for LiveView Dashboard (Read only) | |
| Environmental, General | | |
| Protection Class | IP20 IEC 60529 | |
| Conformal Coating | Airborne contaminants resistance | ISA-S71.04-1985 airborne contaminants class G3 |
| | Material: HumiSeal® 1B31 EPA | According to IPC-CC-830B and IPC-A 610 |
| Operating Temperature | -20° to +70°C (-4 to 158°F) with forced cooling | |
| | -20° to +55°C (-4 to 131°F) without forced cooling | |
| 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/s ² , 55 – 150Hz | |

| | |
|-------------------|--|
| Power Consumption | Max. 4W |
| 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 2014/65/EU |
|----------------|---|
| ATEX | EN 60079-11 EN 60079-15 |
| IEC-Ex | IEC 60079-0 IEC 60079-15 |
| 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 |
| CCC | GB 3836.1-2010 GB 3836.8-2014 |
| Marine | DNV GL rules for classification – Ships and offshore units |
| Cyber Security | IEC 62443 |

Hazardous Area Approvals

| Non-sparking nA in combination with nC | |
|--|---|
| ATEX | II 3G – Ex nA nC IIC Gc, $-20^{\circ}\text{C} \leq T_s \leq 70^{\circ}\text{C}$ (with $T_s \leq 70^{\circ}\text{C}$ the requirements for temperature class T4 are met) |
| IEC-Ex | II 3G – Ex nA nC IIC Gc, $-20^{\circ}\text{C} \leq T_s \leq 70^{\circ}\text{C}$ (with $T_s \leq 70^{\circ}\text{C}$ 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) |
| CCC-EX | Ex nA nC IIC Gc $-20^{\circ}\text{C} \leq T_s \leq 70^{\circ}\text{C}$ |

Ordering Information

| Model Number | Product Description |
|--------------|---|
| A6500-CP | System Communication Card Pro |
| A6500-CP-P | Package A6500-CP & A6500-PE |
| A6500-PE | AMS 6500 ATG – Prediction Extension License |
| A6500-PER | AMS 6500 ATG – Prediction Extension License Redundant (2X A6500-PE) |
| A6500-SD | Spare system SD card for replacement |

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