

CI868A

Compact Product Suite hardware selector



The CI868A can be used to connect an AC 800M controller to external Ethernet devices using IEC 61850 – Edition 2 standard. Since this is a standard for Substation Automation, this allows the combination of Process Automation and Electrical Control in the same controller.

The TP868 Baseplate has two RJ45 Ethernet connectors, where CH1 connector can use 10Mbps or 100Mbps (Mega bits/sec.). The baseplate has a code lock that prevents the installation of an incorrect type of unit onto the TP867 Baseplate.

The CI868 expansion unit contains the CEX-Bus logic, a communication unit and a DC/DC converter that supplies appropriate voltages from the +24 V supply via the CEX-Bus. The Ethernet cable must be connected to the main network through an Ethernet switch.

The CI868A module will only work with System 800xA 6.0.3.3, 6.1.1 and subsequent versions

Features and benefits

- Allows communication via both protocols defined by IEC 61850 standard: MMS (client) and GOOSE
- A maximum of 120 IEDs (GOOSE) and 40 IEDs (MMS) is allowed per CI868A. The combination of both protocols in the same module is allowed. (40 IEDs / CI868A)
- Up to 12 modules can be used in one AC 800M Controller

| General info | |
|----------------------------------|--|
| Article number | 3BSE092691R1 |
| Communication protocol | IEC 61850 |
| Client or server | MMS (Client), Goose (Publisher & Subscriber) |
| Transmission speed | 10/100 Mbit/s |
| Network redundancy | No |
| Module redundancy | No |
| Hot Swap | Yes |
| Used together with HI Controller | Yes |

| Detailed data | |
|-----------------------|----------------------|
| Max units on CEX bus | 12 |
| Connector | RJ-45 female (8-pin) |
| 24 V consumption typ. | typ 160 mA |
| Power dissipation | 3.8 W |

Environment and certification

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|------------------------|--|
| Temperature, Operating | +5 to +55 °C (+41 to +131 °F) |
| Temperature, Storage | -40 to +70 °C (-40 to +158 °F) |
| Altitude | 2000 m according to IEC/EN 61131-2 |
| Pollution degree | Degree 2 according to IEC/EN 61131-2 |
| Corrosion protection | G3 compliant to ISA 71.04 |
| Relative humidity | 5 to 95 %, non-condensing |
| Protection class | IP20 according to EN60529, IEC 529 |
| CE-marking | Yes |
| Electrical Safety | UL 61010-1, UL 61010-2-201 |
| Hazardous location | UL 60079-15, cULus Class 1, Zone 2, AEx nA IIC T4, ExnA IIC T4Gc X |
| Marine certificates | DNV-GL, (Pending: ABS, BV, LR) |
| RoHS compliance | DIRECTIVE/2011/65/EU (EN 50581:2012) |
| WEEE compliance | DIRECTIVE/2012/19/EU |

Dimensions

| | |
|-------------------------|--------------------|
| Width | 59 mm (2.3 in.) |
| Height | 185 mm (7.3 in.) |
| Depth | 127.5 mm (5.0 in.) |
| Weight (including base) | 700 g (1.5 lbs) |

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