Modbus TCP Interface - CI867

The CI867/TP867 is used for connection between an AC 800M controller and external Ethernet devices using Modbus TCP protocol.

The TP867 Baseplate has two RJ45 Ethernet connectors, where Ch1 connector can use 10Mbps or 100Mbps (Mega bits/sec.) and Ch2 use 10Mbps only. The baseplate has a code lock, that prevents the installation of an incorrect type of unit onto the TP867 Baseplate.

The CI867 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 CI867 can be set redundant and supports hot swap.

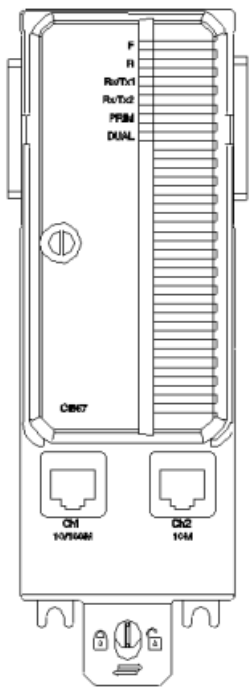


Figure 35. Modbus TCP Interface

Modbus TCP Interface CI867

Table 18. Modbus TCP Interface CI867 - Technical Specification

Item	Value
Type	Ethernet unit
Galvanic isolation	Modbus TCP
Communication speed Ch1	10 Mbit/s / 100 Mbit/s defined in IEEE 802.3u 10/100Base-Tx
Communication speed Ch2	10 Mbit/s defined in IEEE 802.3 10Base-T
Status indicators	Running normally: Green. Exceptional fault: Red. Two traffic indictors – RxTx1 and RxTx2 -- controlled by traffic pace: Flashing Yellow Running as primary: Yellow. Running in a redundant configuration: Yellow.
Connectors	RJ45
Current consumption (from CEX-Bus 24VDC)	160 mA typical (250 mA max)
Power dissipation	3.8W typical
Protection Rating	IP20 according to EN60529, IEC 529.
Weight	700 g (1.5 lb) (package CI867K01with CI867 and TP867).
Dimensions	W 59 x H 185 x D 127.5 mm (W 2.9 x H 7.3 x D 5.0 in)
Certification	UL508 and UL60079-15 listings pending Hazardous location Class 1 Zone 2
Hot swap	Yes

Table 40. Recommended Components – Process Cables

Component	Description
Modbus TCP Interface CI867	• Use in minimum cable of category 5 (STP cables) • Max. length 30 m from CI867 to next Ethernet device.
IEC 61850 Interface CI868	• Use in minimum cable of category 5 (STP cables) • Max. length 30 m from CI868 to next Ethernet device.
AF 100 Interface CI869	• Twisted pair cable according to IEC 1158-2 fieldbus standard. • Max. 750m per segment.
EtherNet/IP Interface CI873	• Use in minimum cable of category 5 (STP cables). • Max. length 30 m from CI873 to next Ethernet device.