

CI867 and TP867 – Modbus TCP Interface

Key Features

- Provides one 10/100Mbps Fast Ethernet port, (RJ45 connector located on the TP867 Baseplate).
- Provides one 10Mbps Ethernet port, (RJ45 connector located on the TP867 Baseplate).
- Simple DIN-rail mounting.
- Provides communication with Modbus TCP protocol via Ethernet.
- Pre-set, two-letter Alpha code locking device installed in unit base prevents mounting of incompatible components.
- Supports hot swap.

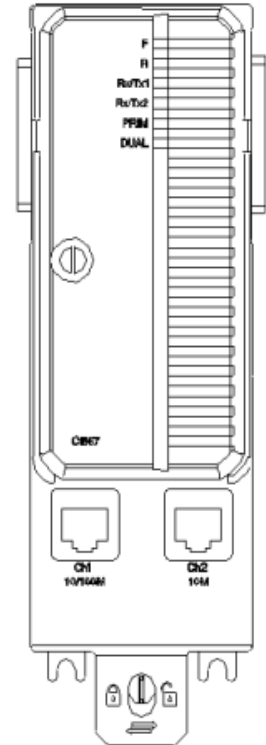
Description

The CI867/TP867 can be used to connect an AC 800M controller to 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 (see [Table 4](#) on page 75) 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.



Functional Block Diagram

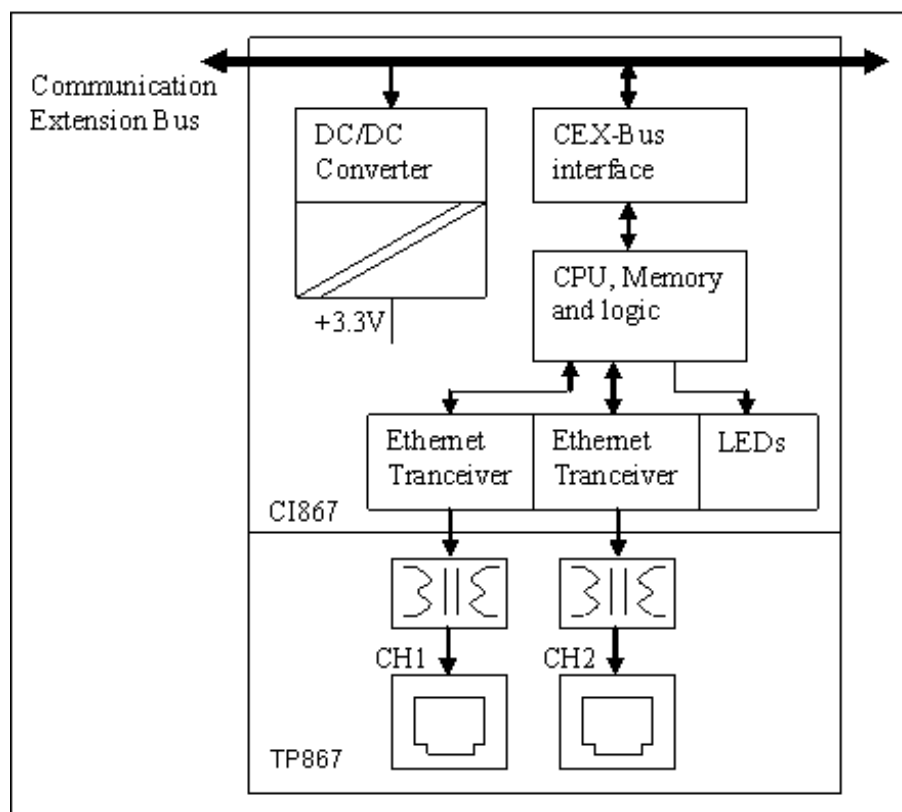


Figure 81. Block Diagram – CI867

Indicators*Table 94. Modbus TCP Interface CI867 - LED indicators*

Designation/Color	Function
F(ault) / Red	Unit error detected. Set by the Hardware during Controller Reset. Controlled by Control Software after Reset.
R(un) / Green	Operating. Cleared by the Hardware during Controller Reset. Controlled by Control Software after Reset.
RxTx1 / Yellow	When flashing. Ethernet packages are sent/received at CH 1.
RxTx2 / Yellow	When flashing. Ethernet packages are sent/received At CH 2.
PRIM(ary)	This LED is on in single and redundant configuration. Indicates Primary CI867 in redundant configuration.
DUAL	This LED is on when CI867 is running in redundant configuration.

Technical Data*Table 95. Modbus TCP Interface CI867 - Technical Specification*

Item	Value
Type	Ethernet unit
Protocol	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

Table 95. Modbus TCP Interface CI867 - Technical Specification

Status indicators	Running normally: Green. Exceptional fault: Red. Two traffic indicators – RxTx1 and RxTx2 -- controlled by traffic pace: Flashing Yellow Traffic indicator CH2 – RxTx2 - controlled by traffic pace. 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 CI867K01 with 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)