

Triconex CM3201

Communication Module

Manufacturer	Triconex
Model / order number	CM3201
Product identification	Communication Module
System / family context	Trident v2 Systems

Verified scope

Base model 3201: three isolated serial ports and two Ethernet ports. NET 1 operates at 10 Mbps; NET 2 operates at 100 Mbps. Two CMs can be fitted to a CM baseplate.

Engineering checks before replacement

- Distinguish NET 1 and NET 2 speed and media options.
- Include external MAU consumption in the logic-power budget.
- Record serial master/slave roles and framing.
- Check network addresses and the approved redundant connection scheme.

Original manufacturer source reference

Technical Product Guide for Trident v2 Systems, product specifications extract; revision not shown. Original PDF pages 11, 12, 13.

Open manufacturer document (hosted copy)

This cover is an independent Sales PLC reference, not a manufacturer-issued datasheet. The following manufacturer pages retain their original text, layout and page numbering.

Request model verification or a quotation

info@amikon.cn | +86 18020776786

www.salesplcauto.com

Communication Module

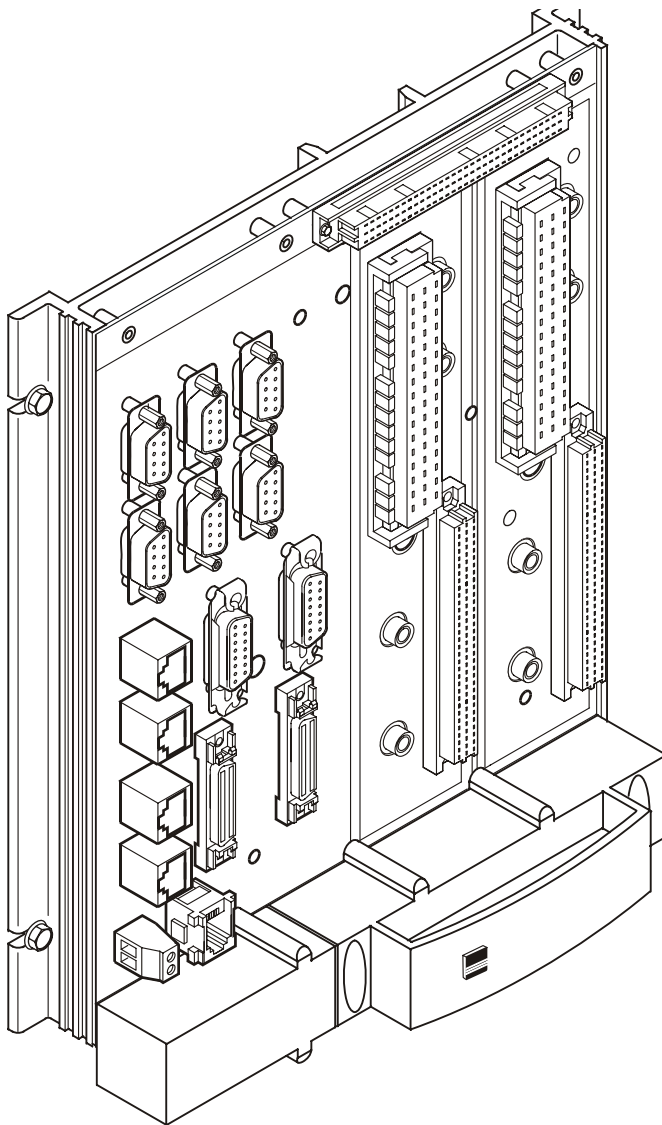
The Communication Module (CM) is a one-to-one interface to the MPs. The Trident v2 CM enables communication with:

- External host computers
- Distributed control systems (DCS)
- Open networks

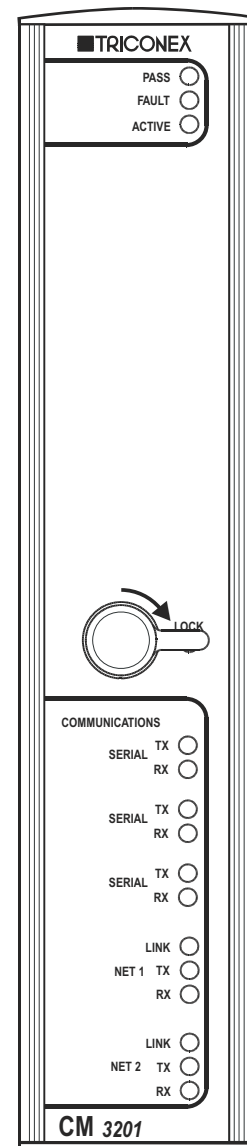
- Network printers
- Other Trident v2 systems
- Tricon version 9–10 systems

A single Trident controller can support up to two CMs on one CM Baseplate. Each CM operates independently and supports three RS-232 or RS-485 serial ports and two Ethernet ports per CM.

Two CMs can provide redundant communication connections or additional independent communications ports.



CM Baseplate



CM Front Panel

Product Specifications

Communication Capabilities

Each CM provides the following communication capabilities:

- Serial ports
- Network ports
- Multiple protocol support

Serial Ports

Each CM provides three optically isolated RS-232 or RS-485 serial ports which are user-configurable for Modbus point-to-point or multi-point (network) connections. Transmission rates up to 115 kilobits per second per port can be selected.

Network Ports

Each CM provides two network ports which are configured as follows:

One 10-megabit Ethernet port, with the following connectors:

- 10BaseT
- Attachment unit interface (AUI) for a 10-megabit media adapter unit (MAU)

One 100-megabit Ethernet port, with the following connectors:

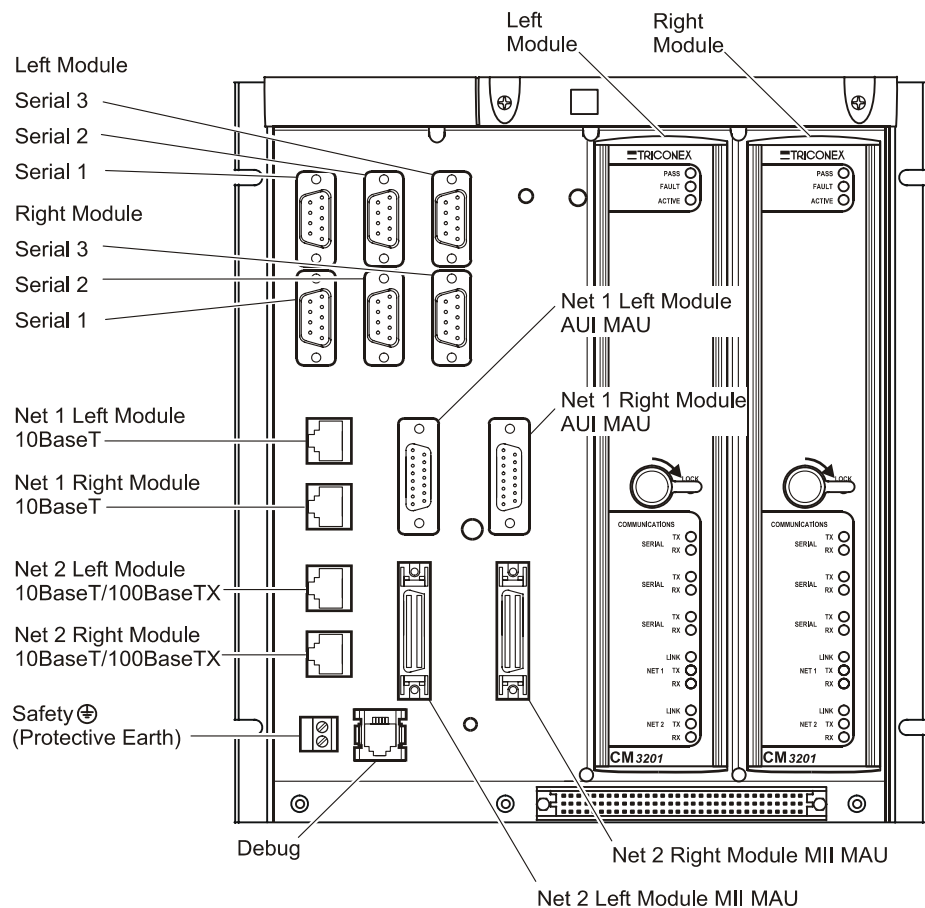
- 100BaseTX
- Media independent interface (MII) for a 100-megabit MAU

Media adapter units may be used in place of the 10/100 BaseT RJ-45 twisted-pair connections to convert the CM network ports to other Ethernet media types or to extend network distances.

Supported Protocols

Each CM serial port supports these protocols:

- Modbus master (RTU)
- Modbus slave (ASCII or RTU)



CM Baseplate Connectors

Each CM network port supports these protocols:

- TSAA (UDP/IP)
- TSAA with IP Multicast (UDP/IP)
- TriStation
- Peer-to-Peer (UDP/IP)
- Peer-to-Peer (DLC)
- Modbus Master or Slave (TCP)
- Triconex Time Synchronization via UDP/IP
- SNTP Triconex Time Synchronization

- JetDirect Network Printer Server DLC/LLC

NOTE

The Trident CM supports a maximum of four Modbus TCP ports.

Each CM Net1 network port supports Triconex Time Synchronization via DLC.

Logic Power for CM

Logic power is supplied by the MP Baseplate.

Logic Power

Feature	Specification
Nominal input voltage	24 VDC
Specified operational voltage range	24 VDC –15% or +20% + 5% AC ripple (19.2 to 30 VDC)
Logic power (without MAUs) 10 Mb AUI type MAU 100 Mb MII type MAU	8 W maximum 6 W maximum additional per MAU 3.75 W maximum additional per MAU
Absolute maximum input voltage	33 VDC
Absolute maximum reverse input voltage	–0.6 VDC
Input power interruption time from nominal value Repetition rate	1 ms maximum 1 sec minimum
Reverse current isolation input to input	500 μ A maximum
Inrush current per input	2.4 A maximum, typically 1.2 A for 50 ms
Short circuit current limit per input	2.4 A maximum
Functional earth to logic ground isolation	0 V, no isolation
Protective earth to functional earth isolation	500 VDC
+12 V AUI output power	12 V $\pm$ 10%, 6 W maximum, current limited
+5 V MII output power	5 V $\pm$ 5%, 3.75 W maximum, current limited