

CMN-16 Module CMN-C6TX



Async 2-Wire Short Range Modem Card



DESCRIPTION

- CMN-C6TX, Asynchronous Short Range Modem Card, comprises two short range modems for mounting in the CMN-16 rack. The modems are used for local data distribution, connecting terminals to computers. The modems operate full duplex over 2-wire, using existing unconditioned dedicated lines.
- CMN-C6TX operates at distances up to 1 km (0.6 mile) depending on the wire gauge and data rate (see Table 1). The modems ensure integrity of data transmission at data rates up to 19.2 kbps.

Table 1. Approximate Range

Gauge	19 AWG 0.9 mm	24 AWG 0.5 mm	26 AWG 0.4 mm
Range	1000 m/ 3,300 ft	600 m/ 2,000 ft	400 m/ 1,300 ft

- The transmit carrier is strap-selectable for either continuous or switched operation. In switched operation mode, the carrier is controlled by the DTR signal (Circuit 108/2). Carrier presence is converted to the DSR signal (Circuit 107) in the opposite modem, enabling transfer of one control signal end-to-end. The DCD signal (Circuit 109) remains ON, regardless of the transmit carrier strapping.
- The modems are coupled to the dedicated line via isolation transformers which, in conjunction with other circuitry, protect against AC or DC overvoltages.

INSTALLATION

1. Set the carrier strap to ON or CNTR (controlled) (see Figure 1 and Table 2).

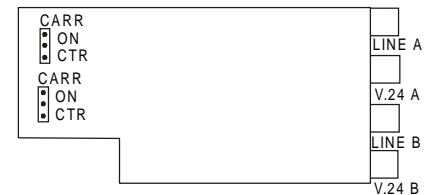


Figure 1. Strapping Diagram

Table 2. Strap Selection

Position	Function	Factor y Setting
ON	Carrier Constantly On	ON
CNTR	Carrier controlled by DTR	

2. Remove the blank panel (if supplied), insert the card into the slot and secure it with the screws provided.
3. Connect the V.24/RS-232 cables to the RJ-45 sockets marked V.24 (see Figure 2 and Table 3).
4. Connect the line cables to the RJ-45 sockets marked LINE (see Table 3).

FEATURES

- Two independent modems per card
- Full duplex over 2-wire
- Compatible with SRM-6TX
- Asynchronous transmission rate up to 19.2 kbps
- Transmission range up to 1 km (0.6 mile)
- One control signal transferred end-to-end
- V.24/RS-232 interface
- LED indicators

CMN-C6TX

Async 2-Wire Short Range Modem Card

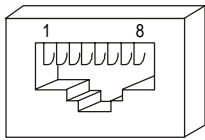
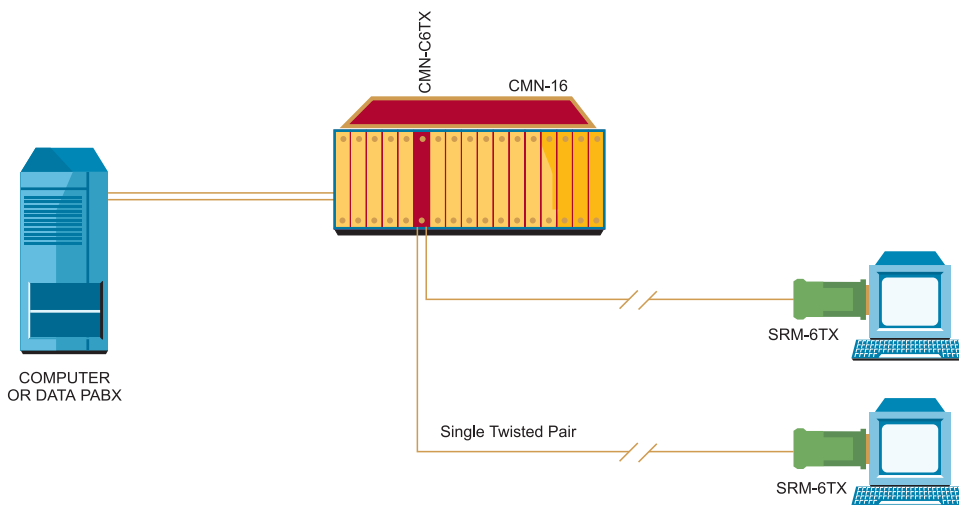


Figure 2. RJ-45 Connector

Table 3. DTE/Line Connections (RJ-45)

Pin No.	Name	Description
DTE (V.24) Connections		
1	DSR	Data Set Ready
2	RTS	Request to Send
3	RD	Receive Data
4	DCD	Data Carrier Detect
5	TD	Transmit Data
6	DTR	Data Terminal Ready
7	SIG.GN D	Signal Ground
8	CTS	Clear to Send
LINE Connections		
2	Ground	
3	No Connection	
4	Line	
5	No Connection	
6	Line	

APPLICATION



SPECIFICATIONS

- Data Rate**
 Up to 19.2 kbps
- Transmission Line**
 2-wire unconditioned telephone line, single twisted pair
- Transmission Mode**
 Asynchronous, full duplex
- Transmission Range**
 Up to 1 km (0.6 miles)
 (see Table 1)
- Transmission Controls**
DCD (Circuit 109) constantly ON;
DTR (Circuit 108) controls the carrier;
DSR (Circuit 107) turns ON immediately after carrier detection;
CTS (Circuit 106) turns ON immediately after terminal raises RTS (Circuit 106)
- Indicators**
 PWR: Power
 Modems A and B:
 XMT: Transmit data
 RCV: Receive data
- Transmission Level**
 0 dBm
- Terminal Interface**
 ITU V.24/EIA RS-232-C, via RJ-45 sockets, one for each modem
- Line Interface**
 Integral RJ-45 sockets, one for each modem
- Power**
 0.25W, derived from the CMN-16 power supply
- Physical**
 Length: 177 mm / 7.0 in
 Width: 67 mm / 2.6 in
 Height: 12 mm / 0.4 in
 Weight: 72 g / 2.5 oz
- Environment**
 Temperature: 0-50°C / 32-122°F
 Humidity: Up to 90%, non-condensing

ORDERING

CMN-C6TX

Dual Asynchronous Short Range Modem Card for CMN-16 Rack



data communications

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