

CMN-16 Module CMN-C6S



Sync Short Range Modem Card



FEATURES

- Synchronous operation
- Compatible with SRM-6S
- Data rates up to 19.2 kbps
- Full duplex
- Internal clock
- Transmission clock
- Transmission range up to 15 km (9 miles)
- Lightning protected
- Four LEDs display

DESCRIPTION

- CMN-C6S is a synchronous short range modem card suitable for mounting in the CMN-16 rack and compatible with SRM-6S. CMN-C6S is used for local data distribution, connecting full duplex sync computers over unconditioned 4-wire lines. Operating at data rates up to 19.2 kbps, it supports distances up to 15 km (9 miles), depending on wire gauge and data rate (see Table 1).
- Transmit timing is provided by internal clock. Data is transmitted and received over a balanced line, ensuring immunity to circuit noise. The low level signals minimize crosstalk to adjacent circuits within the same cable.
- CMN-C6S is coupled to the dedicated line through isolation transformers which, in conjunction with other circuitry, protect against AC or DC overvoltages.

SPECIFICATIONS

- **Data Rates**
1.2, 1.8, 2.4, 3.6, 4.8, 7.2, 9.6, 14.4, 19.2 kbps
selectable by rotary switch
- **Transmission Line**
4-wire unconditioned dedicated line (two twisted pairs)
- **Transmission Mode**
Sync, full duplex
- **Transmission Controls**
DCD (Circuit 109) turns ON after recognizing the receive signal from the line
CTS (Circuit 106) turns ON 8 msec after the terminal raises RTS (Circuit 105)
DSR (Circuit 107) is ON whenever the modem is powered
- **Transmission Level**
0 dBm
- **Front Panel LED Indicators**
PWR Power
XMT Transmit Data
RCV Receive Data
DCD Data Carrier Detect
- **Transmission Range**
Up to 15 km (9 miles)
(see Table 1)

Table 1. Approximate Range, Point to point

Data Rates (kbps)	19 AWG (0.9 mm)		24 AWG (0.5 mm)		26 AWG (0.4 mm)	
	km	miles	km	miles	km	miles
19.2	9.0	6.2	4.0	2.5	3.0	1.9
14.4	10.0	6.2	4.5	2.8	3.2	2.0
9.6	11.0	6.9	5.0	3.1	3.7	2.3
7.2	12.0	7.5	5.5	3.4	4.0	2.5
4.8	13.0	8.1	6.0	3.7	4.5	2.8
3.6	13.0	8.1	6.0	3.7	4.5	2.8
2.4	14.5	9.0	6.5	4.0	4.8	3.0
1.8	14.5	9.0	6.5	4.0	4.8	3.0
1.2	14.5	9.0	6.5	4.0	4.8	3.0

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- **Terminal Interface**
EIA RS-232-C/ITU V.24 25-pin female connector
- **Line Interface**
RJ-45 socket (see *Table 2*)

Table 2. Line Connector (RJ-45)

Pin No.	Signal Name	Description
2	GND	Ground
3	RCV-	Receive-
4	XMT-	Transmit-
5	XMT+	Transmit+
6	RCV+	Receive+

- **Power**
0.4W, derived from the CMN-16 power supply
- **Physical**
Length: 19.5 cm / 7.5"
Width: 2.5 cm / 1.0"
Height: 8.4 cm / 3.2"
Weight: 110g / 3.9 oz
- **Environment**
Temperature: 0-50°C / 32-122°F
Humidity: Up to 90%, non-condensing

INSTALLATION

1. Set the data rate to the application requirements using the rotary switch (see *Table 3, Data Rate Selection*).
2. Insert the card through the back of the CMN-16.
3. Install the front panel, which is supplied with the card.

Table 3. Data Rate Selection

Setting	Data Rate (kbps)	Factory Setting
0	19.2	
1	14.4	
2	9.6	9.6
3	7.2	
4	4.8	
5	3.6	
6	2.4	
7	1.8	
8	1.2	

4. Connect the RS-232/V.24 cable to the 25-pin socket.
5. Connect the line cable to the RJ-45 socket.

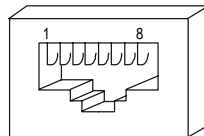


Figure 1. RJ-45 Socket

ORDERING

CMN-C6S

Sync Short Range Modem Card for CMN-16 Rack



data communications

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