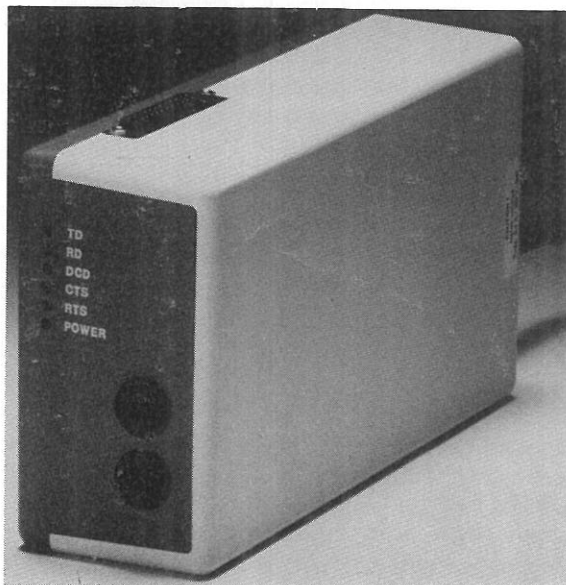


KM-3 SYNCHRONOUS SHORT HAUL MODEM



The KM-3 Synchronous Short Haul Modem is designed for medium to high speed serial data communication over in-house or local lines. It operates at data rates of 1200, 2400, 4800, 9600 or 19200 bits/s. Operation is simplex or full/half duplex, two or four wire, point to point or multi-drop, internally or externally clocked.

The KM-3 is completely independent of and transparent to data formats and line protocols used.

Electrical isolation between modems is achieved by using optocouplers. The KM-3 utilizes frequency modulation, and transmission is performed by two-way, balanced current loops. This technique allows a 10 km maximum distance between modems at 1200 baud.

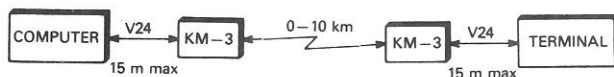
On the front panel of the unit there are six LED indicators to facilitate installation, supervision and trouble-shooting.

Strap selectable Clear To Send (CTS) delays are provided in the unit.

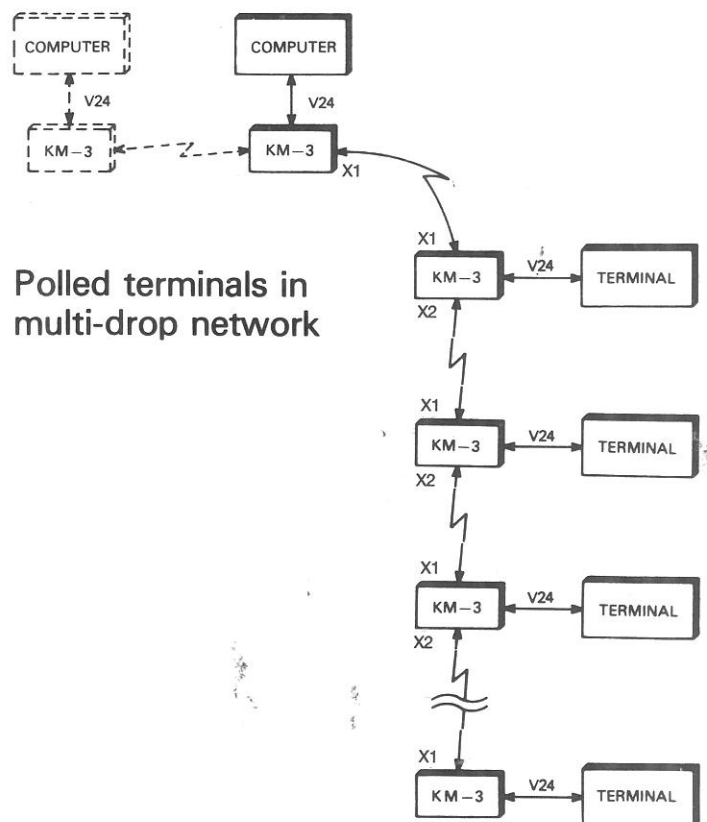
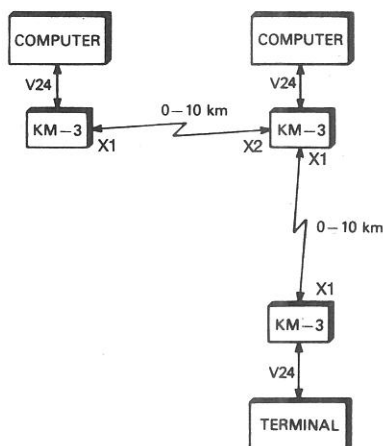
The KM-3 can either be supplied in a table top/wall mount box, or as a plug-in unit for the WESTERMO 19" rack system, type RV.

TYPICAL SYSTEMS APPLICATIONS

Point-to-point connection



Two computers share one terminal



Polled terminals in multi-drop network

FEATURES

- ☐ Synchronous transmission
- ☐ Simplex or half/full duplex
- ☐ Speeds to 19.2 kbaud
- ☐ EIA RS232 / CCITT V.24, V.28
- ☐ 2- or 4-wire
- ☐ Opto-Coupler isolation

- ☐ Distances up to 10 km
- ☐ Point-to-point or multi-point connection
- ☐ Internal/External clock
- ☐ Strappable CTS delay
- ☐ Easy to use and install
- ☐ Small size and low cost

SPECIFICATIONS

Interface
Transmission
Configurations
Data format
Speed
Clock
Ready For Sending delay
Line
Line interface
Number of line interfaces
Line distance

According to EIA RS232-C and CCITT V.24/V.28
Synchronous, simplex or half/full duplex
Point-to-point or multi-point
Transparent to data formats
1200, 2400, 4800, 9600, 19200 bits/sec, (strap selectable).
Internal or external (automatic selection).
16 different time delays 0-300 ms (strap selectable)
Simplex: One twisted pair. Half/full duplex: Two twisted pairs.
 ± 10 mA opto-isolated balanced current loops.
Two

Cable characteristics	Speed bit/s				
	1200	2400	4800	9600	19200
0,3 mm ² 42 p F/m	12000 m	8000 m	5000 m	2500 m	1000 m

Front panel indicators

Use twisted pair cable. Transmission distance is reduced if cable with higher capacitance and decreased area is used. Use shielded cable in heavy industrial interference environments.

Note: If shielded cable is used, distances should be reduced by factor of 3.

- Request to send (RTS)
- Ready for sending (CTS)
- Transmitted data (TD)
- Received data (RD)
- Received line signal detector (DCD)
- Power on

110 x 188 x 60 mm

0.75 kg

Wall-mounted or table-top

220/110 VAC $\pm 10\%$, 50/60 Hz (factory wired)

5-40°C

0-95% RH, non-condensing

Dimensions

Weight

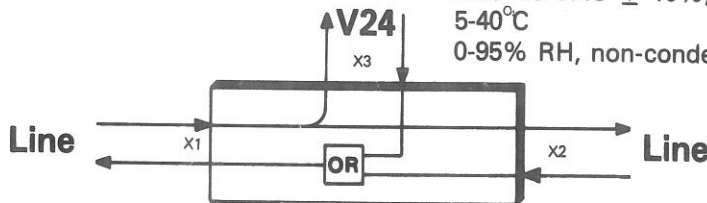
Mounting

Power

Temperature range

Humidity

BLOCK DIAGRAM



DTE CONNECTION (To DB25S X3 connector)

Pin No	CCITT V.24 Designation	EIARS-232C Designation	Interchange Circuit Name
1	101	AA	Protective ground
2	103	BA	Transmitted data
3	104	BB	Received data
4	105	CA	Request to send
5	106	CB	Ready for sending
6	107	CC	Data set ready
7	102	AB	Signal ground
8	109	CF	Received line signal detector
15	114	DB	Transmitter signal element timing (DCE Source)
17	115	DD	Receiver signal element timing
20	108/2	CD	Data terminal ready
24	113	DA	Transmitter signal element timing (DTE Source)



WESTERMO TELEINDUSTRI AB
S-640 40 ST. SUNDBY SWEDEN