ORDERING

MME/V.35/*/#
Synchronous Unpowered Modem Eliminator

MME/V.35/P/*/#
Synchronous Externally-Powered Modem Eliminator

* Specify data rate:
56 for 56 kbps
64 for 64 kbps

Specify DTE connector:
M-F for one male and one female connector
F-F for two female connectors
M-M for two male connectors
(MME/V.35 only)

P/S-AC/9/500
9 VDC / 90 to 264 VAC, 500 mA power supply

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224-100-08/00

MME/V.35

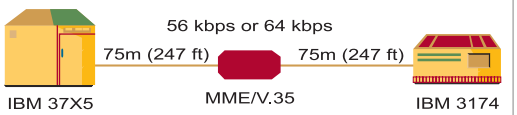
RAD

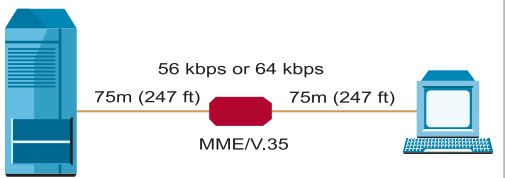
Synchronous Modem Eliminator

FEATURES

- Synchronous modem eliminator
- Data rates of 56 kbps or 64 kbps
- Range of 75m (247 ft) on each side
- Two models: with or without external power supply
- V.35 interface
- Selectable RTS to CTS delay
- Carrier controlled or constantly ON
- Easy to install and configure
- Miniature, lightweight

APPLICATIONS





DESCRIPTION

- MME/V.35, synchronous modem eliminator, replaces two synchronous modems by permitting direct port-to-port connection.
- MME/V.35 operates at data rates of 56 kbps or 64 kbps, connecting two synchronous DTEs at ranges of up to 75m (247 ft) on each side.
- Two models are available: MME/V.35 and MME/V.35/P:
  - MME/V.35 operates without AC supply, using ultra low power from the V.35 control signals. For proper operation, the DTE (computer or controller) should provide the RTS and DTR control signals.
  - MME/V.35/P requires an external power supply and should be used in applications where the DTE control signals are not available.

Note: *Unless otherwise indicated, MME/V.35 refers to both the powered and non-powered versions.*

- MME/V.35 generates the receive and transmit clocks required for proper operation of the two synchronous DTEs, as well as all the control signals necessary to emulate half or full duplex operation.
- The delay between RTS and CTS can be independently set on either port to 0, 7, or 64 msec for 64 kbps or to 0, 7 or 73 msec for 56 kbps.
- The DCD signal can either be set to constantly ON, or used as a port-to-port handshaking signal, where RTS on one port is converted to DCD on the other port.
- Physical connection between MME/V.35 and its associated terminal and computer is via two 34-pin V.35 connectors on a 85 cm (2.8 ft) cable, either both female or one male and one female.

SPECIFICATIONS

- **Transmission Format**
  Synchronous
- **Transmission Mode**
  Emulates half or full duplex lines
- **Data Rates**
  56 kbps or 64 kbps (see *Ordering*)
- **Range**
  75m (247 ft) on each side
- **RTS/CTS Delay**
  0, 7 or 64 msec for 64 kbps
  0, 7 or 73 msec for 56 kbps
- **DCD**
  Continuously ON or controlled by RTS from the DTE on the other side
- **Interface**
  V.35
- **Connectors**
  Two 34-pin V.35 connectors, on a 85 cm (2.8 ft) cable: both male (for MME/V.35 only), both female, or one male and one female (see *Ordering*)

- **Power**
  MME/V.35
  No power supply required; uses ultra-low power from the V.35 control signals. To ensure proper operation, the equipment connected to MME/V.35 should provide the RTS and DTR control signals.

  MME/V.35/P
  Operates with an external power supply of 9–12 VDC / 160–200 mA (see *Ordering*)
  Power connection via a miniature jack: tip (positive), and sleeve (ground)
- **Physical**

Length:	130	mm	/ 5.1	in
Width:	50	mm	/ 2.0	in
Height:	30	mm	/ 1.2	in
Weight:	300g		/ 10.5oz	

- **Environment**
  Temperature: 0–50°C / 32–122°F
  Humidity: Up to 95%, non-condensing

Declaration of Conformity

Mfr. Name: RAD Data Communications Ltd.
Mfr. Address: 12 Hanechoshet St.
Tel Aviv 69710
Israel

declares that the product:

Product Name: MME/V.35

Conforms to the following standard(s) or other normative document(s):

EMC: EN 55022 (1994): Limits and methods of measurement of radio disturbance characteristics of information technology equipment.
EN 50082-1 (1992): Electromagnetic compatibility – Generic immunity standards for residential, commercial and light industry.

Supplementary Information:
The product herewith complies with the requirements of the EMC Directive 89/336/EEC. The product was tested in a typical configuration.

Tel Aviv, August 7th 1996

Haim Karshen
VP Quality

European Contact: RAD Data Communications GmbH, Berner Strasse 77, 60437 Frankfurt am Main, Germany

INSTALLATION

Caution. *Be careful when setting jumpers or performing any actions within the product so that you do not bend or break any components.*

Installation of the MME/V.35 is straightforward and simple. Just follow these steps:

1. Open the unit by pressing the marked places on the sides. If this is difficult, insert a small screwdriver into the slot, where there is a small opening. Lift the handle, gently levering the tip of the screwdriver down. The cover will separate without pressure.

Caution: *Do not insert the screwdriver straight into the middle of the slot, as this may break off the prongs which snap the cover together.*

2. Configure MME/V.35 according to the desired mode, referring to *Figure 1*, *Figure 2* and *Table 1*.
3. Close the unit and connect it to the computer and terminal either directly or through a V.35 cable.
4. For MME/V.35/P, connect the external power supply to the unit, and then plug it into the main power supply.

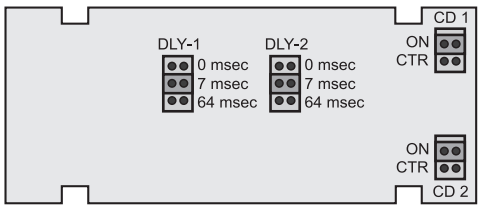


Figure 1. Jumper Locations (64 kbps unit)

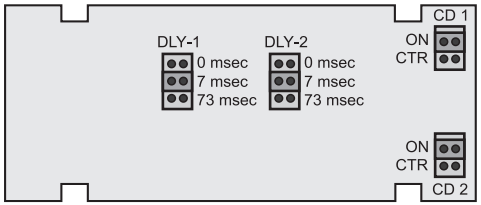


Figure 2. Jumper Locations (56 kbps unit)

Table 1. Jumper Settings

Jumper	Function	Possible Settings	Factory Setting
DLY-1	Selects delay between receipt of RTS and CTS for port 1	0 msec 7 msec 64 msec	7 msec
DLY-2	Selects delay between receipt of RTS and CTS for port 2	0 msec 7 msec 64 msec	7 msec
CD1	Selects the carrier to be constantly ON or controlled by RTS for port 1	ON CTR	ON
CD2	Selects the carrier to be constantly ON or controlled by RTS for port 2	ON CTR	ON

Note: *The DLY-1 and DLY-2 jumper settings listed in Table 1 pertain to the 64 kbps MME/V.35 units. The delay setting for the 56 kbps units are 0 msec, 7 msec and 73 msec, respectively.*