# Frame E1 / V.35 / Ethernet Fiber Modem
## MODEL: FOM-V.35



## Overview:

FE1/V.35/ETH fiber modem is to modulate framing to single or multi-mode fiber. Suit for transmit additional management data channel in different fibers. The fiber for transmit data can be used to monitor and control local and remote devices, and no collision will occur. Their data transmission rate ranges from 64kbps to 2,048kbps, their fiber wavelength is suitable for transmitting in band management channel in different fiber line, and can let the same fiber line of transmitting data be used for monitoring and controlling the local or remote devices without interference. V.35/FE1/ETH fiber modem can be used as a local device and connect with E1/V.35/ETH Fiber modem.

## Features

- Adopt high reliability and low consumption ASIC chip
- Full testing and monitoring abilities for easy operation and maintenance
- Provide various power supply options (AC 220V, DC -48V, DC +24V).
- Provide SC or FC fiber interface and various fiber power budget option for short or long haul purpose.
- Special two row indicator ( upper row indicate local, and lower row indicate remote)
- Based on self-copyright IC, and software content is high
- Realize random time-slot choice, compose N*64K (N=1~32) channel.
- Provide 3 type loop functions: local (ANA), loop to remote (DIG), command loop (REM).
- PBRS code testing function, convenient for install and test devices.
- Remote rate adjustment to remote device (in primary clock status) when local terminal is in primary clock status.
- FE1 Fiber Modem can use with V.35 Fiber Modem or Ethernet Fiber Modem, that can save a G.703/V.35/Ethernet converter.
- Network management use SNMP or RS485, can monitor all local and remote devices throuht (IP MAN) Ethernet

## Specifications

| Items | Technical Specifications | | |
|---|---|---|---|
| Model | FOM-FE1 | FOM-V.35 | FOM-ETH |
| E1 interface | Rate: 2.048Mbit/sw±50ppm<br>Code: HDB3<br>E1 interface: 75ohm (unbalance) and 120ohm (balance)<br>Interface character: match G.703<br>Connector: BNC(75ohm), RJ45(120ohm)<br>Jitter tolerance: fine than G.742 and G.823<br>Clock: Synchronize input E1 signal | | |
| V.35 Interface | Transmission velocity: N×64Kbps (N=1~32)<br>Electric characteristics: According ITU-T V.35<br>Connector: DB25<br>Connector way: DCE or DTE<br>Clock way: V.35 master clock and V.35 salve clock | | |
| FE interface | Standard: IEEE802.3/u 10Base-T and 10/100Base-TX/FX<br>Support: 802.3x full-duplex flow control<br>Link Loss link: alarm functions<br>MAC address form: Can learn 4096 types of MAC address<br>Total Memory Sizes: 64MBits SDRAM<br>Physical interface: RJ45,support auto-MDIX | | |

| Optical Interfaces | Connector | SC or FC | | |
|---|---|---|---|---|
| | Optical Spec | Item | Output (dBm) | Sensitivity (dBm) |
| | | 1310nm (standard) | -5 ~ -12 | ≤-36 |
| | | 1310nm (long haul, optional) | 0 ~ -5 | ≤-36 |
| | | 1550nm (DFB, long haul, optional) | 0 ~ -5 | ≤-36 |
| | | Bi-directional single fiber (Optional) | -8 ~ -14 (Tx: 1550nm)<br>0 ~ -5 (Tx: 1310nm) | ≤-30 |

| Power supply | AC: ~220V (165V ~ 265V)<br>DC: -48V (-38V ~ -63V)<br>DC: +24V (12V ~ 36V) | |
|---|---|---|
| | Power consumption | ≤3W |
| Dimension | FOM-FE1, FOM-V.35, FOM-ETH | 212(L) x 138(W) x 30(H)mm |
| Working environment | Temperature | 0~50°C |
| | Humidity | ≤90% (non-condensing) |

## Application

| E1 Network | ←---→ | FE1 Fiber Modem | ←-Fiber-→ | V.35 Fiber Modem | ←---→ | V.35 Router |
|---|---|---|---|---|---|---|
| E1 Network | ←---→ | FE1 Fiber Modem | ←-Fiber-→ | Ethernet Fiber Modem | ←---→ | Ethernet Router |
| V.35 Router | ←---→ | V.35 Fiber Modem | ←-Fiber-→ | Ethernet Fiber Modem | ←---→ | Ethernet Router |

Point to point application

## Information Order

| FOM-FE1/XYZ | E1 N*64K (N=1~32) Fiber Modem |
|---|---|
| FOM-V.35/XYZ | V.35 N*64K (N=1~32) Fiber Modem |
| FOM-ETH/XYZ | Ethernet N*64K (N=1~32) Fiber Modem |
| X= | SC, FC option |
| Y= | 20KM, 40Km, 60KM, 80KM, 120KM |
| Z= | AC220V (165V ~ 265V)<br>DC48V (-38V ~ -63V)<br>DC24V (12V ~ 36V) |