

## CuteLink FE1 Fiber Modem

### CL-FOM100S

#### Product Overview



CL-FOM100S FE1 Fiber Modem is a high-performance E1 fiber optic modem developed by using a dedicated integrated circuit. It is to modulate a framing or non-framing E1 data signal directly into single(R) mode or multi-mode optic fiber for a transmission via optic cable line. At another end of the optic cable, optical signal is demodulated into a framing or non-framing E1, ETH, or V.35 data signal. E1, ETH, or V.35 interface may be directly connected with the E1, ETH, or V.35 interfaces of image and data terminals or the WAN ports of MUX, exchanger and router for a dedicated network setup or a LAN connection. Network management of fiber modem is based on SNMP, and its network management method has two kinds: local management through RS232 port, remote management based on TCP/IP. And this network management module has GUI interface with strong function.

#### Device Feature

- Conforms to all relevant ITU series standards( ITU-T G.703 G.704 G.823)
- Transmit one E1 channel
- Framing or non-framing mode in option
- E1 time slot in arbitrary option
- Clocks selectable: internal clock, external clock or recovered clock
- Balanced 120Ω/non-balanced 75Ω interfaces automatic
- Support the loop back of local analog/digital interface
- Support remote loop back function (valid on under framing mode)
- Support pseudo-random code test function, providing convenience for the test of optic fiber line status
- 120km trunking -free transmission distance for single-mode optic fiber

- Capable to be communicated with V.35 fiber modem
- Available with complete line detection and alarm indications
- Available with independent structure and 19-inch frame-mounted structure (frame-mounted structure can be inserted with 16 modules);
- AC 220V and DC -48V inputs may be selected for fiber optic modems of both structures;
- For frame-mounted fiber optic modems, dual power supply heat backup is provided to ensure a Receiving level: 0~-43db

## Specification

**Protocol:** G.703, G.704, G.736, G.823, I.431, SNMP

### Optic interface:

Line mode type: HDB3

Line mode rate: 2.048Mbps

Operating wavelength: 850nm, 1310nm or 1550nm

Optic fiber connector: SC/PC or LC/PC or FC/PC

Applicable optic fiber: multi-mode, single-mode

Transmission distance: Single-mode: up to 120km Multi-mode: up to 2km

### E1 interface:

Standard: ITU-T G.703, G.704

Frame structure: framing CCS (PCM31) / CAS (PCM30)

Rate: N\*64Kbps (N=1~31) or 2.048Mbps

Impedance: 75Ω, physical interface BNC、120Ω, physical interface RJ45

Code: HDB3

Receiving level: 0~-43db

Clock: internal clock, external clock or recovered clock

### Structure:

Standalone : 140mm (depth) x 210mm(width) x 42mm(height)

Rack mount: 19" 4.5U standard casing

### Power supply:

Standalone: 85V~264V AC input, 5V/2A output、  
-36V~-72V DC input, 5V/2A output



### Other Specification:

Operating temperature: 0°C ~ 50°C

Storage temperature: -20°C ~ 80°C

Humidity: 5%~90% (free of condensate)

Context test real time: >99,9%, operating 24/24h

## CuteLink V.35 Fiber Modem

### CL-FOM135S

#### Product Overview



CL-FOM135S V.35 Fiber Modem is a high-performance V.35 fiber optic modem developed by using a dedicated integrated circuit. It is to modulate a N\*64K V.35 data signal directly over single- or multi-mode optic fiber for a transmission via optic cable line. At another end of the optic cable, optical signal is demodulated into a V.35 data signal. V.35 interface may be directly connected with the V.35 interfaces of image and data terminals or the WAN ports of MUX, exchanger and router for a dedicated network setup or a LAN connection.

#### Device Feature

- Rate Nx64Kbit/s (N=1—32)
- Clocks selectable: internal clock, external clock or recovered clock
- Support the loopback of local analog/digital interface
- Support remote loopback function
- Support pseudo-random code test function
- 120km trunking -free transmission distance for single-mode optic fiber
- Capable to be communicated with FE1 Fiber Modem
- Available with complete line detection and alarm indications
- Available with independent structure and 19-inch Rack-mountable structure Rack-mountable structure can be inserted with 16 modules
- AC 220V and DC -48V inputs may be selected for fiber optic modems of both structure
- For Rack-mountable fiber optic modems, dual power supply heat backup is provided to ensure a high operating reliability

## Specification

**Protocol:** G.703, G.704, G.736, G.823, I.431, SNMP

### Optic interface:

Line mode type: HDB3

Line mode rate: 2.048Mbps

Operating wavelength: 850nm, 1310nm or 1550nm

Optic fiber connector: SC/PC or LC/PC or FC/PC

Applicable optic fiber: multi-mode, single-mode

Transmission distance: Single-mode: up to 120km Multi-mode: up to 2km

### V.35 interface:

Line code: HDB3

Data rate:  $N \times 64\text{Kbps}$  ( $N=1\sim 32$ )

Available with CTS/RTS (Hardware) flow control function

Type of connector: M34 connector

Operating mode: DCE

### Structure:

Standalone: 140mm (depth) x 210mm (width) x 42mm (height)

Rack mount: 19" 4.5U standard casing

### Power supply:

Standalone: 85V~264V AC input, 5V/2A output 、

-36V~-72V DC input, 5V/2A output

Rack mount: 150V~260V AC input, 5V/16A 、 12V/1A output

-38V~-58V DC input, 5V/16A 、 12V/1A output

### Other Specification:

Operating temperature:  $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$

Storage temperature:  $-20^{\circ}\text{C} \sim 80^{\circ}\text{C}$

Humidity: 5%~90% (free of condensate)

Context test real time: >99,9%, operating 24/24h

## CuteLink ETH Fiber Modem

### CL-FOM101S

#### Product Overview



CL-FOM101S ETH Fiber Modem is a high-performance ETH fiber optic modem developed by using a dedicated integrated circuit. It is to modulate a framing or non-framing E1 data signal directly into single(R) mode or multi-mode optic fiber for a transmission via optic cable line. At another end of the optic cable, optical signal is demodulated into a framing or non-framing E1, ETH, or V.35 data signal. E1, ETH, or V.35 interface may be directly connected with the E1, ETH, or V.35 interfaces of image and data terminals or the WAN ports of MUX, exchanger and router for a dedicated network setup or a LAN connection. Network management of fiber modem is based on SNMP, and its network management method has two kinds: local management through RS232 port, remote management based on TCP/IP. And this network management module has GUI interface with strong function.

#### Device Feature

1. Developed from the integrated circuit with our own property right.
2. Select timeslot randomly to combine data transmission channel at rate up to  $N*64K(N=1 \text{ to } 32)$
3. Offer three timepieces: master, external, slave.
4. Offer three loop functions: loop back to local port, loop back to remote port and ordering the remote port to loop back.
5. Have rich online monitor and acousto-optic alarming function.
6. Have two statuses: master and slave. When in the slave, it can adjust the rate of the remote abutting port.
7. Completed pseudo-random code testing function makes installing and adjusting more

easily.

8. Support SNMP.

## Specification

**Protocol:** G.703, G.704, G.736, G.823, I.431, IEEE802.3, SNMP

### Optic interface:

Line mode type: HDB3

Line mode rate: 2.048Mbps

Operating wavelength: 850nm, 1310nm or 1550nm

Optic fiber connector: SC/PC or LC/PC or FC/PC

Applicable optic fiber: multi-mode, single-mode

Transmission distance: Single-mode: up to 120km Multi-mode: up to 2km

### Ethernet interface:

Data Rate: 10/100Mbps auto-negotiation

Standard: Compatible with IEEE802.3

Type of connector: RJ-45

Full duplex auto-negotiation

### Structure:

Standalone: 140mm (depth) x 210mm (width) x 42mm (height)

Rack mount: 19" 4.5U standard casing

### Power supply:

Standalone: 85V~264V AC input, 5V/2A output、

-36V~-72V DC input, 5V/2A output

Rack mount: 150V~260V AC input, 5V/16A、12V/1A output

-38V~-58V DC input, 5V/16A、12V/1A output

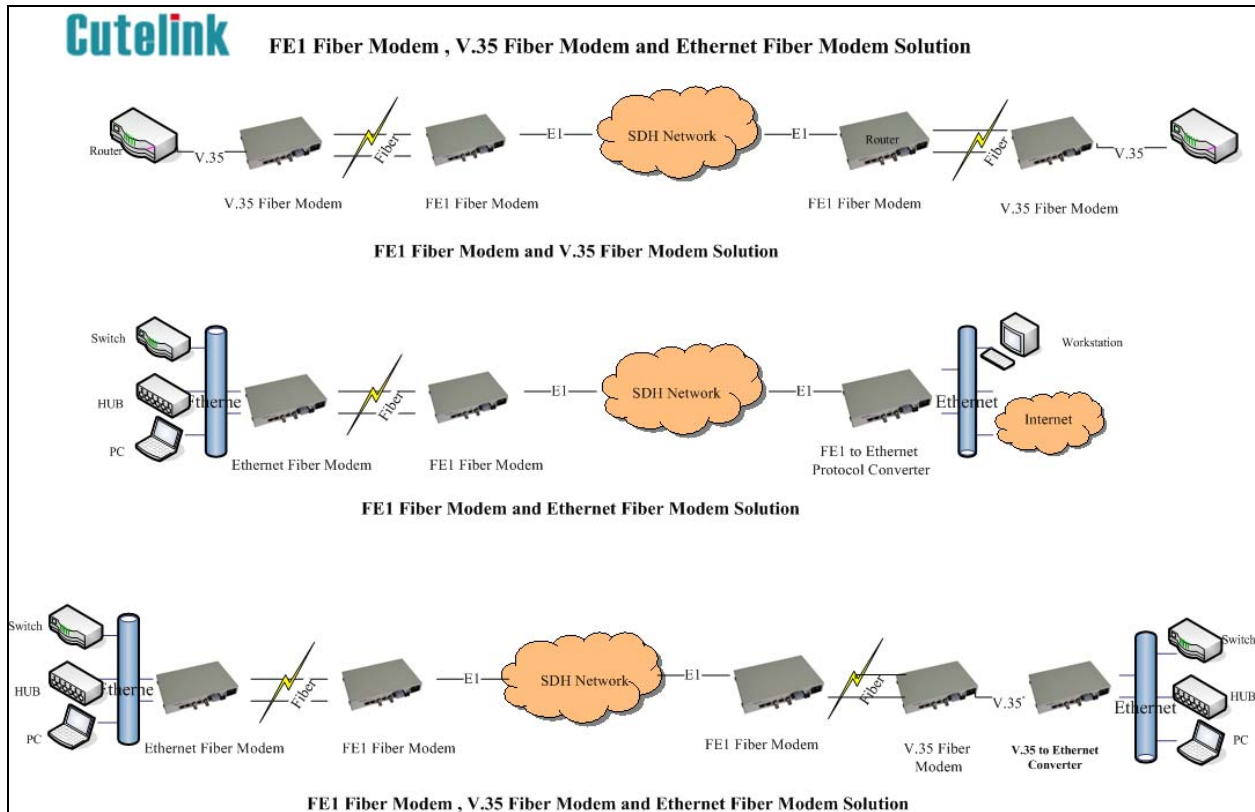
### Other Specification:

Operating temperature: 0°C~50°C

Storage temperature: -20°C~80°C

Humidity: 5%~90% (free of condensate)

Application



Model

Model	Description
CL -FOM100S	FE1 Fiber Modem Simple Version (Single Power)
CL- FOM101S	Ethernet Fiber Modem Simple Version (Single Power)
CL-FOM135S	V.35 Fiber Modem Simple Version (Single Power)

