CuteLink Ethernet Over STM-1 SDH Transmission

CL-EOS-01/02/03/04-M Ethernet Over STM-1 SDH Multiplexer

Device Overview

CL-EOS Series take SDH technology as its core to provide access, provide broadband IP service, realize access and convergence faced with broadband data application, and is a device for comprehensive access conversion in the applications between Ethernet access services and SDH load-carrying net.

The devices is supplied with 2 interfaces, STM-1 interface (network interface) and 100M Ethernet interface (user interface), Ethernet data frames from access network received by Ethernet interface is converted STM-1 SDH frames, and conveyed to SDH rig net through STM-1 interface. Whole communication is realized through convergence and data receiving on the opposite terminal.

Providing sound level ensured data transmission service, module designed for complete device, STM-1 interface and Ethernet interface can be optional for electrical or optical port.

Typical applications include IP DSLAM backhauling, enterprise connectivity, and high-bandwidth private line services。

CL-EOS-01-M

CL-EOS-04-M

CL-EOS-04-M (AC&DC)

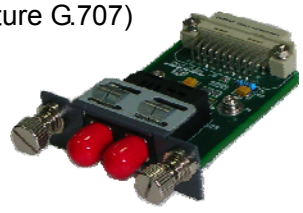
Device Feature

- Providing one STM-1 interface (optical/ electrical) and one FE interface （optical/ electrical），hot swap for all daughter boards, convenient for maintenance and replacement.
- CL-EOS carries potted Ethernet services via VC-4 in SDH；
- CL-EOS provides very low time delay and delay jitter(within 10μs), supporting real-time data transmission QOS；
- Modular design, compact conformation (19 inch 1U)，desktop or rack mounted；
- Optional configuration for power supply：AC220V、DC-48V , single power supply、AC220V &DC-48V and redundancy power supply or
- Supporting remote fault alarm and power monitoring, hot swap for power module；
- NMS type device, supporting SNMP based on Ethernet interface, supporting third party MIB browser management, supporting Ethernet graphical management software, supporting RS232 hyper terminal management（TL1 command line）；
- Independent installation and start for NMS software and hardware, NMS fault and line up NMS with business will not affect the normal business，

Specification

1. *STM-1* optical card

Optical Rate	155520kbit/s(STM-1，G.957， frame structure G.707)
Interface code	Compliance with code in G.957
Digital signal	compliance with G.707,G.958
Light source	LD
Output optical power	≥—9dBm（single mode）
Receiver type	PINFET
Receiving sensitivity	≤—35dBm（BER≤10-11）（single mode）
Optical connector type	FC / SC / ST
Center wavelength	single mode 310 / 1550 nm multimode 850nm



Transmission distance 0～40km (40～100km customerized)

STM-1 electrical Interface board

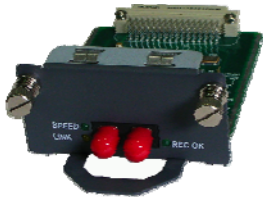
Bit rate 155520kbit/s

Interface code type CMI

Digital signals G.707

consumption 12.7dB，transmission distance of 75Ω copper coaxial cables is around 80 meters.

Ethernet Optical card



Interface type 100M Base-FX

Interface standard compliance with IEEE802.3 100 Base-FX

transmission code 100Mbps

light source LD

output optical power ≥－9dBm（single mode）

receiver type PINFET

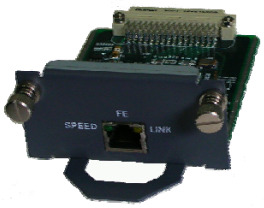
Receiving sensitivity ≤－35dBm（BER≤10-11）（single mode）

Optical connector type FC / SC/ST

Center wavelength single mode 1310 / 1550 nm multimode 850nm

Transmission distance 0～40km (40～100km customerized)

Ethernet Electrical Card



User type：RJ45 10 /100M Base-T

Interface standard：compliance withIEEE802.3 10/100M Base-T

Transmission code：10/100M

Power Supply

Input voltage AC220V&DC- 48V

Voltage fluctuation 165VAC～265VAC or －36VDC～－72VDC

consumption ＜15W

mechanical parameter

standalone（19″）

external dimension 440mm(W)×43.5mm(H)×245mm(D，including ground terminal)

weight <3.0 kg

chassis type EIA 19″

Environment

The device's operating temperature covers wide range and it can work stably under extreme environment

Operating temperature 0℃ ~ +45℃

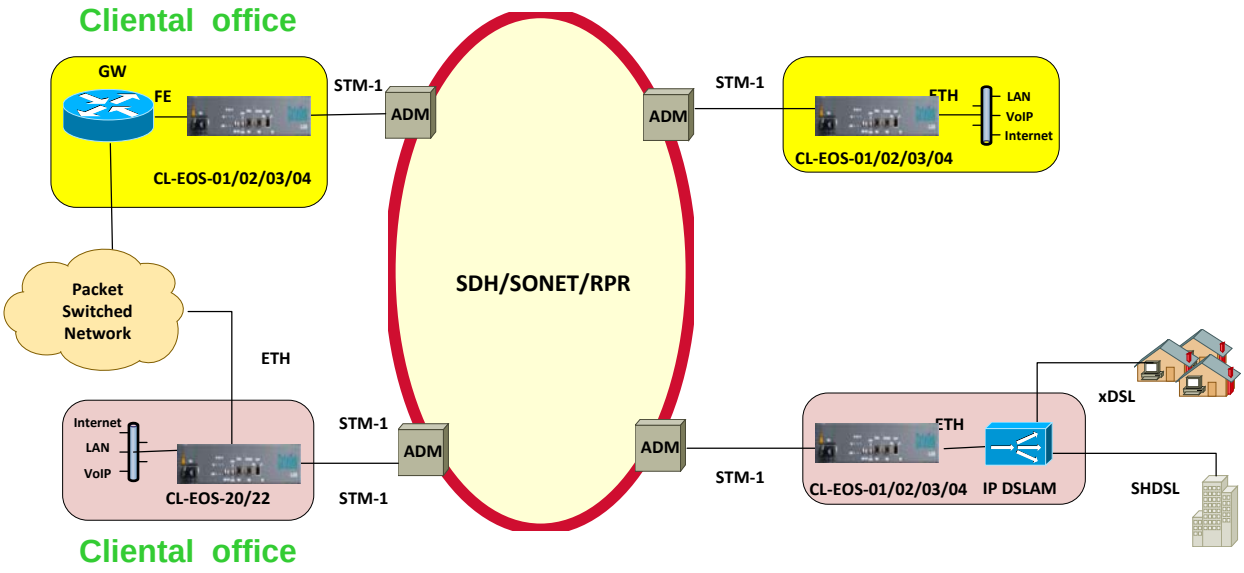
Storage temperature －20℃ ~ +70℃

Relative humidity 10 % ~ 95 %

Atmospheric pressure 70 ~ 106 kpa

Free from corrosive and solvent gases, flying dust, and interference of strong magnetic field

Application



Model

Model	Description
CL-EOS-01-M	STM-1/Ethernet（FE）Network Bridge，Interface：1 STM-1optical interface，acc.to G.664standard，SC/PC single mode 20Km；User interface：1 Ethernet electrical port（100M,RJ45）,AC+DC ,SNMP
CL-E0S-02-M	STM-1/Ethernet（FE）Network Bridge，Line interface：1 STM-1 electrical port，acc.to G.707standard；User interface：1 Ethernet optical port ,acc.to IEEE802.3 100M Base-FX standard SC/PC single mode 20Km, AC+DC ,SNMP
CL-E0S-03-M	STM-1/（FE），line interface：one STM-1 optical interface，compliance with standard G.664，SC/PC single mode 20Km ；User interface：one Ethernet optical interface, AC+DC ,SNMP
CL-E0S-04-M	STM-1/（FE），line interface：one STM-1 electrical interface，transmission distance of 75Ω copper coaxial cables is around 80 meters；User interface：one Ethernet electrical interface， AC+DC ,SNMP