

CuteLink MSAP STM-1 SDH Transmission

CL-S155T MSAP STM-1 SDH Multiplexer

Device Overview

CL-S155T MSAP STM-1 SDH Transmission is adapt the kernel of SDH to transmit and collect the signal of PDH optical interface,STM-1 optical interface,E1 interface and so on with two standardized STM-1 optical interfaces as the up connection. It supports 63 channels of E1 at most ; supports expanding Ethernet interface at rate of 100M; has ITU-T G.813 element location timing; VC-12 cross connection and channel protection function.It enables the connection with SDH transmission to be more seamless and managed; reduces the the DDF distribution frame and 2M lines; reduce the investment; reduce the fault rate; offers better access solutions for the operators to adapt.



CL-S155 STM-1 SDH Transmission



CL-S155 STM-1 SDH Transmission Modules

Device Feature

- Have 16 E1 interfaces, enable to expand to 63 E1 interface at most and Ethernet interface with rate of 100M
- Offer two STM-1 optical interfaces; enable to connect with various SDH devices; have 1+1 protection; can switch within 50ms; and enable recover to the normal status from the fault status.
- Adapt the kernel of SDH with SDH clock function.
- Adapt the plug-in design; enable to transmit E1, V.35 and Ethernet signal through the interface card; be the collection of our existed protocol converters and can connect with the existed devices.
- Have network management.
- Rackmount adapt the 4U rack, compatible with 220V and -48V, offer two powercards with heat backup function.
- Flexible connection: point to point, single-directional channel protection with double fiber.
- Extends the fiber link up to 120 km without any repeater.
- Compact single board Terminal.
- 100~220V Ac and -48VDC power supply is optional.

Specification

1. STM-1 interface

Rate: 155.520Mb/s \pm 4.6ppm

Code type: NRZ

Average Optical power rate

-8dBm ~ -15dBm (STM – 1 short transmission distance)

0dBm ~ -5dBm (STM – 1 long transmission distance)

Sensitivity: superior to -36dB

Standard: ITU-T G.957/G.958

Medium type: ITU-T G.652/G.653, single mode

Working wave length: 1310nm (1550nm optional, indicate when ordering)

Connector: SC or FC

2. E1 interface

Rate: 2.048Mb/s \pm 50ppm

Frequency tolerance: \pm 50ppm

Code type: HDB3

Standard: ITU-T G.703

Impedance: 75 ohms unbalanced (120 ohms is optional)

Connector: Q9 (75ohms), RJ45 or RJ48-C (120 ohms)

Flitter: complied with ITU-T G.832

3. **Serial network management interface**

Rate: 19200b/s

Connector: RJ-45

4. **Ethernet network management interface**

Rate: 10/100M auto-negotiation

Duplex mode: full/half duplex auto-negotiation

Connector: RJ-45

Standard: ITU-T G.784

5. **Ethernet bussiness interface**

Rate: 10/100M auto-negotiation

Duplex mode: full/half duplex auto-negotiation

Connector: RJ-45

Connective cable: universal Ethernet data cable

Standard: IEEE 802.3

6. **V.35 interface**

Rate: $N * 64\text{Kbit/s}$ ($N=1 \sim 32$)

Interface: Complied with V.35 standard

Connector: DB25 (female)

Connection method: DEC(use cross cables)

7. **Optical interface**

Rate: 155.520Mb/s

Transmission code type: 5B/6B

Optical wave length: 850, 1310, 1550nm optional

Average optical power

$\geq -8\text{dBm}$ (single mode.1310.LED)

$\geq -18\text{dBm}$ (multimode.850.LED)

$\geq -25\text{dBm}$ (multimode.1310.LED)

Receiving sensitivity $\leq -36\text{dBm}$

Dynamic range of receiving sensitivity $\geq 25\text{dB}$

Optical interfcace:type FC/SC optional,

8. **Working condition**

Power:180 VAC~260 VAC or -38 VDC \sim - 72 VDC

Fully equipment power consumption 70W \pm 10%

Operation temperature:-20 $^{\circ}\text{C}$ \sim +70 $^{\circ}\text{C}$

Humidity: \leq 95%

Atmospheric pressure: 70kpa \sim 106kpa

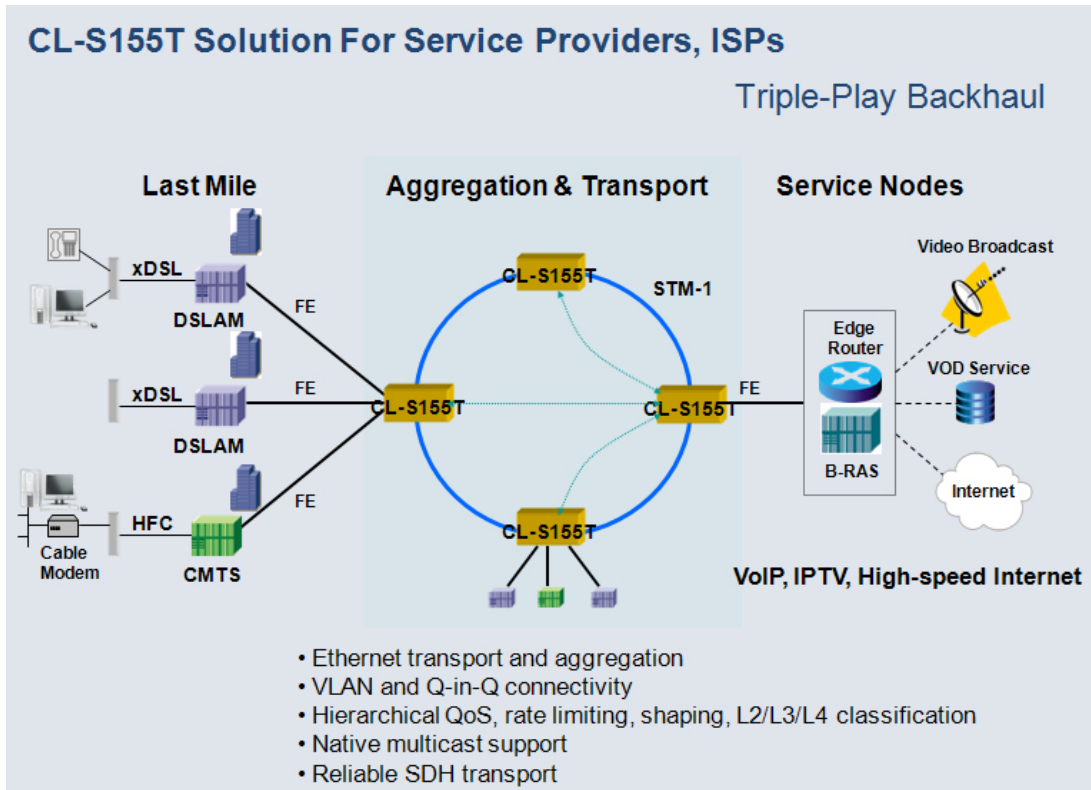
Storage temperature:-20 $^{\circ}\text{C}$ \sim +70 $^{\circ}\text{C}$

9. **Dimension:**

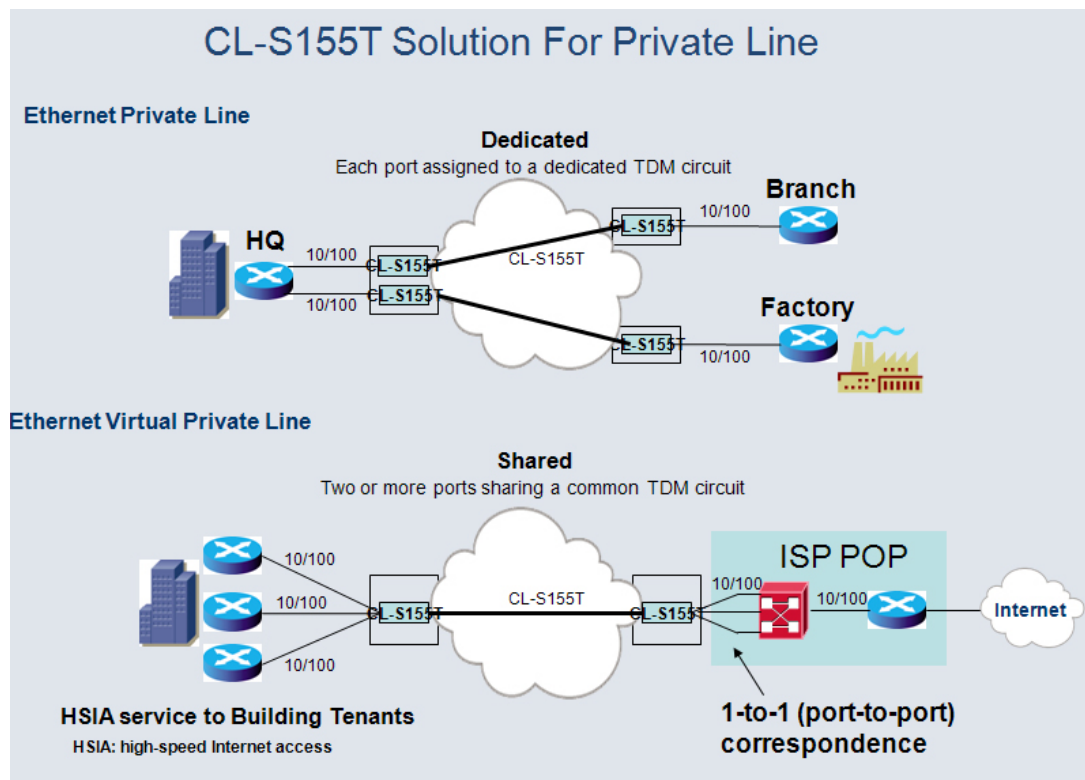
483mm*165mm*177mm (can be mounted onto 19inch rack)

Application

1. Application For ISP



2. Application For VPN



Model

| Model | Description |
|-----------------|---|
| CL-S155T | STM-1 MSAP SDH Mux,63E1 Capacity,4/8/16*E1 module(optional),4*10/100 Base-T FE module,4 MST slots,,SNMP network management,1+1 Optical STM-1 interface(optional),220V or -48V |
| Optional | |
| CL-S155T-S1 | STM-1 Optical Card |
| CL-S155T-4FE | 4*FE Ethernet Card |
| CL-S155T-4E | 4*E1 Card |
| CL-S155T-8E | 8*E1 Card |
| CL-S155T-16E1 | 16*E1 Card |
| CL-S155T-2V | 2*v.35 Card |
| CL-S155T-4E2FE | 4E1+2FE Card |
| CL-S155T-5P | 5M 16E1 Patch Cord |