GL-E8008U-CM-P 8FE POE ONU

Product description:

The GL-E8008U-CM-P type ONU product fully complies with IEEE 802.3-2005 and China Telecom's EPON equipment technical requirements V2.1, adopts a unified open software and hardware architecture, and has the characteristics of carrier-class operation, management and easy maintenance. . Applicable to FTTB construction mode. Provide customers with high-speed data services.

Features:

• Comply with IEEE802.3-2005 standard and CTC V2.1 technical requirements.

>Support Ethernet service layer 2 switching and line-speed forwarding of uplink and downlink services.

>Support frame filtering and suppression, support standard 802.1Q Vlan function, support VLAN conversion.

>Support 4094 VLANs (802.1Q), support dynamic bandwidth allocation function (DBA).

>Support QoS, including business flow classification, priority marking, queuing and scheduling, traffic shaping and traffic control, etc.

• A single ONU supports up to 8 LLIDs.

>Support IGMP Snooping, support Ethernet port speed limit, loop detection, and Layer 2 isolation.

>Support power failure alarm, support remote reset and restart function, support restore factory parameter function, support data encryption

>Support status detection and fault reporting functions, support lightning protection for power supplies and lightning protection for business ports.

•AGC working rage 10dB CNR ≥4dB@-6dBm (input), C/CSO&C/CTB ≤-60dB

POE power supply characteristics:

>Support IEEE802.3af and IEEE802.3at,
>MSCC automatic extension, semi-automatic, automatic mode;
>Maximum output power: 25W;
>Working temperature: -10 degrees to 85 degrees
>Built-in 3.3V and 5V voltage regulator

Optical properties：

>Support single-fiber bidirectional (single-fiber three-way) transmission with wavelength division multiplexing technology
>Interface type: SC/PC, SC/APC (type ONU)
>Maximum splitting ratio: 1:32
>Speed: Up and down symmetrical 1.25Gbps
>Send wavelength: 1310 nm
>Receiving wavelength: 1490 nm
>Output optical power: -1~+4dBm
>Receiving sensitivity: <-26dBm
>The longest distance between OLT and ONU supports 20 kilometers

Port characteristics：

- 1*PON port
- 8*10/100M Ethernet port

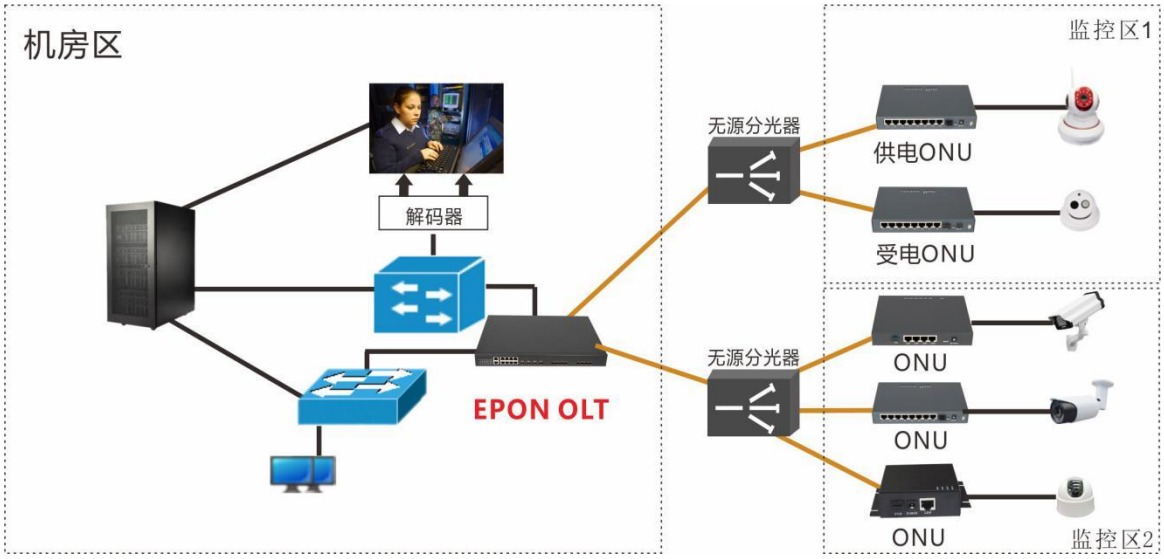
Other features:

Certification: Comply with CE, FCC, ROHS and other standards
EMC / EMI: Comply with VCCI Class B, FCC Part 15 B standards
Safety: Comply with UL 60950 safety regulations
Anti-lightning and anti-surge voltage protection: in line with ITU-T K.21 standard

Physical characteristics:

Physical size: 259*119*30 (length×width×height, unit: mm)
Power supply: 12V1A
Power consumption: 7W
Temperature:
Working temperature: -10～55℃
Storage temperature: -30～60℃
Relative humidity: 10～90% (non-condensing)

Application scheme 1: Monitoring



The advantages of PON in monitoring applications:

1. Reduce the cost of network construction, which is lower than traditional solutions. Traditional video surveillance systems mostly use video coaxial cables or network cables. For long-distance transmissions, they use the form of video optical transceiver + optical cable + video optical transceiver. After using PON technology, an ONU can be connected to multiple IPs within a hundred meters range through network cables. The number of cameras and equipment will be greatly reduced.

2. The stability of the entire network is greatly improved. PON systems generally consist of optical splitters and optical fibers. The main component is glass and has a long service life. Without active equipment, it avoids the common failures of active equipment such as power outages, lightning strikes, overcurrent and overvoltage damage, and has high network reliability and significant Reduce maintenance costs.

3. Long-distance video surveillance network covers a wide range: it can provide 0.5-20KM long-distance video signal access, basically covering the range of medium-sized urban areas. Most of the cameras in the city can directly transmit image information to the bureau through the optical network Video surveillance platform.

4. Large transmission bandwidth: The bandwidth of each ONU can be dynamically adjusted between 2M~1Gbps, and the average upstream bandwidth of each ONU is about 30M, that is, in one OLT port (the backbone fiber can carry 100 video streams).

5. Flexible networking: The networking model is not limited, and chain, tree, and star networks can be flexibly formed through the combination of different optical splitters. According to the different geographical locations of the cameras and the different needs of customers, the networking mode can be adjusted to meet the rational configuration of network resources.
6. Simple system expansion. PON is transparent to the transmission system used to a certain extent. When the number of monitoring points is required, the expansion operation on the transmission side is convenient.

Application plan 2: FTTX

Features: It adopts a unified open software and hardware architecture, provides powerful network management functions, can realize flexible networking and management of the system, has the characteristics of carrier-class operation, manageability, and easy maintenance, and supports multiple VLANs and VLAN conversions. Provide users with fiber to the building (FTTB, Fiber To The Building) and fiber to the home (FTTH, Fiber To The Home) solutions.

Data ONU access scenario: