GL-E8016U-P 16FE POE ONU

Product overview ：

E8016U-NP is an EPON upstream, 16*1000M electrical ports with POE power supply function, a POE ONU specially designed for security. The ONU can directly provide users with IP data access. Based on the mature, stable and cost-effective EPON technology,it provides a PON interface and 16 100/1000M adaptive electrical interfaces. It adopts single fiber wavelength division multiplexing technology (downlink 1490nm, uplink 1310nm), only one optical fiber is connected to the OLT, the maximum transmission distance can reach 20 kilometers, and it supports the power-down reporting function. The 16 POE electrical ports have the function of automatically detecting and identifying PD devices that meet the IEEE 802 af/at standard and powering them, so there is no need to worry about damaging PoE or non-PoE devices of private standards. It is an ideal choice for economical use of PoE to deploy wireless access points (AP) and IP-based network surveillance cameras for small business networks. It can effectively solve the problems of cumbersome maintenance, wireless coverage, terminal equipment power supply, and security monitoring engineering chief, saving engineering costs to the maximum.

16FE POE ONU

Product feature：

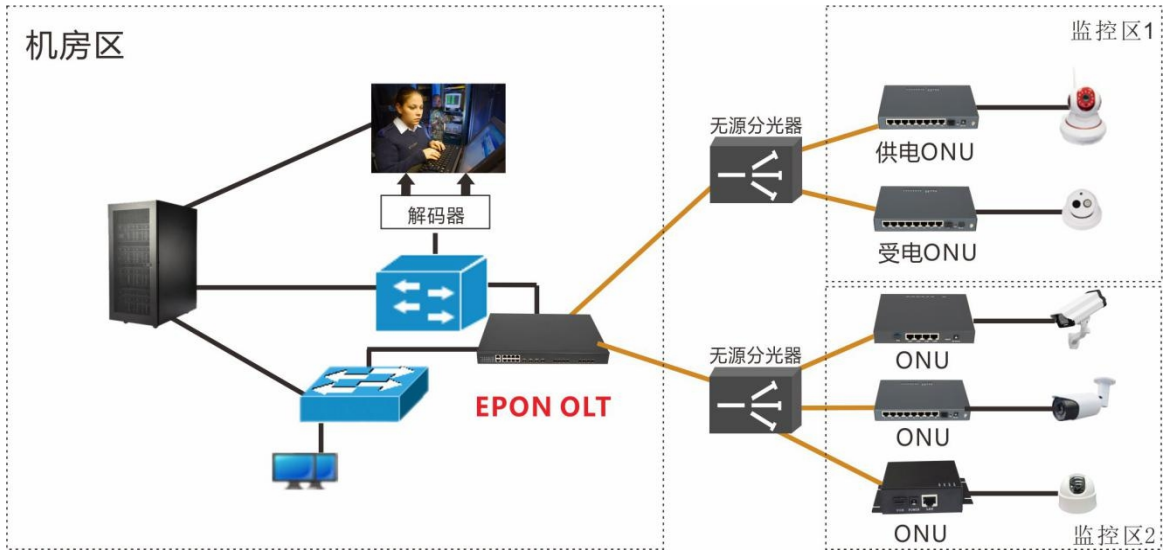
Meet the technical requirements of IEEE802.3ah-2005 and CTC EPON equipment
>Support symmetrical 1Gbit/s rate
>Support 1 LLID, support two-way FEC, support RS (255,239) FEC codec
>Support downstream three-fold agitation, support AES128 decryption function
>Support synchronous Ethernet function, support SBA and DBA bandwidth allocation
>Support Dying-Gasp detection and reporting
>Support mainstream ONU detection
>Two-way wire-speed forwarding of Layer 2 data services, supporting 1K MAC address tables in bridge mode >Support 802.3, 802.1Q Tag/Untag Ethernet frame, support QinQ
>Support flexible tag processing, compatible with CTC2.1, TR156 requirements
>Support energy saving in line with CTC2.1 standard
>Support L2, L3 (IPv4/6) multicast forwarding, support multiple forwarding methods, including: DMAC, DMAC +VLAN, DIP, IP+SIP,DIP+VLAN, DIP+SIP+VLAN
>Support QOS function
>Adopt single fiber wavelength division multiplexing technology (downlink 1490nm, uplink 1310nm), only need one optical fiber to connect with OLT, the transmission distance can reach 40 kilometers\
>Installation and maintenance are easy to do, support local/remote multiple methods for management configuration and software upgrades, and cooperate with the central office OLT to achieve remote fault diagnosis and location functions, greatly reducing maintenance workload
>The 100M electrical port supports power supply through wireless access points (AP) and network surveillance cameras (sur veillance cameras) via Category 5 Ethernet cables
>POE power port supports IEEE802.3af/at standard PD equipment
>Ultra-long-distance data transmission and power supply, with a distance of up to 100 meters, saves power lines, and can be flexibly installed for wireless AP and network monitoring equipment engineering
>Store-and-forward exchange mechanism
>Intelligent power supply, the lowest power consumption, to ensure the power demand of the PD
>With power circuit protection function to protect the safety of back-end equipment
>The zero configuration characteristic power is automatically supplied to the adaptive device
>Fanless silent design, energy saving and environmental protection
>The machine is designed with hanging ears, which can be flexibly placed in positions such as switches and walls
>Support loop detection
>Support port no connection power saving function

Technical parameters

Model:		E8016U-P
	Input voltage	AC100-240V 50-60Hz
	Power consumption	The machine itself consumes:<15W Total power consumption:<250w
Port parameters	network port	1~16 下行网口：10/100Mbps 1 上行 PON 口： 1.25Gbps/SC
	Transmission distance	1~16 downstream POE network port：100m CCTV ON downstream support 250m upstream network port:<100m upstream optical port 0-120KM optional
	Transmission medium	1-16 downstream network port:Cat5e/6 standard UTP network cable upstream optical port:fiber/SFP

	POE standard	Comply with IEEE 802.3af/at international standard, single port maximum power supply 30W
	POE power supply mode	End jumper
	POE power supply	Single POE port≤30W,Whole machine＜250W
Exchange parameters	Network standard	IEEE802.3i,IEEE802.3u,IEEE802.3ab,IEEE802.3z,IEEE802.3x,IEEE802.3az,IEEE802.1Q(VLAN), IEEE 802.1w(RSTP)、 IEEE 802.3af/at
	Backplane bandwidth	7.2Gbps
	Forwarding method	Store and forward
	Forwarding rate	10Mbps:14880pps, 100Mbps:148800pps
	Packet data cache	5.4M
	MAC address table	4K
Status Indicator	Power Indicator	1 indicating power supply (green)
	Fiber optic indicator	GF port green light
	Ultra long-distance transmission indicator	1 indicator CCTV (green)
	POE power port LED	PoE status indication 16 RJ45 yellow lights
	Network data port LED	Data status indication 16 RJ45 green lights
Switch	Dial switch	Default state CCTV state,1-16 port isolation and speed down to 10M,Data and power transmission distance 250 meters Vlan mode,Downstream port isolation
Protection level	Lightning protection for communication ports	4KV executive standard:IEC61000-4-5
Environment specification	Operating temperature	-20℃~55℃
	Storage temperature	-40℃~70℃
	Humidity (non-condensing)	5~95%
Physical specifications	Size	330 x 205 x 44.5mm
	Color	Black
	Weight	1.7kg
Reliability	Mean time between failures	＞50000h

应用方案：监控



PON 在监控应用中的优势：

1、降低网络建设成本，较传统方案建网成本更低。传统的视频监控系统大多是采用视频同轴线缆或者网线，距离远的采用视频光端机+光缆+视频光端机的形式传送，而使用 PON 技术后一个 ONU 可通过网线连接百米范围内多个的 IP 摄像机，设备数量将大大减少。

2、整个网络稳定性大大提高。PON 系统一般是分光器及光纤，主要成分是玻璃，使用寿命长；没有有源设备，也就避免了停电、雷击、过流过压损坏等有源设备的常见故障，网络可靠性高，显著降低维护费用。

3、运程视频监控网络覆盖范围广阔：可提供 0.5~20KM 的远距离视频信号接入，基本覆盖中等规模城区的范围，绝大多数市内的摄像机可直接通过光网络将图像信息传送至局方的视频监控平台。

4、传输带宽大：每个 ONU 的带宽可在 2M~1Gbps 间动态调整，每个 ONU 平均上行带宽在 30M 左右，即一个 OLT 端口中(主干光纤可带 100 路视频码流)。

5、组网灵活：组网模型不受限制，通过不同分光器的组合可以灵活组建链型、树型、星型网络。可根据摄像机的不同地理位置，以及客户的不同需求，调整组网方式，以满足网络资源的合理化配置。

6、系统扩容简单。PON 在一定程度上对所使用的传输体制是透明的，监控点数量需要时，传输侧扩容操作方便。