GL-E8016U-X 16 口百兆 ONU

Product overview：

The 16FE port iron-shell EPON ONU is a corridor-type client ONU device in the Ethernet Passive Optical Network (EPON) series of
Shenzhen Guanlian Communication Technology Co., Ltd. It follows the IEEE802.3ah international standard, YD/T 1475-2006 Ministry of
Industry and Information Technology standard , CTC 2.1 telecommunications standards and radio and television related standards,
with good central office compatibility, can be interconnected with mainstream central office manufacturers OLT equipment. With
good manageability and built-in high-speed switching function, it is especially suitable for applications such as fiber to the
building (FTTB), premises network, fiber to the enterprise, and Internet of Things.

Product features：

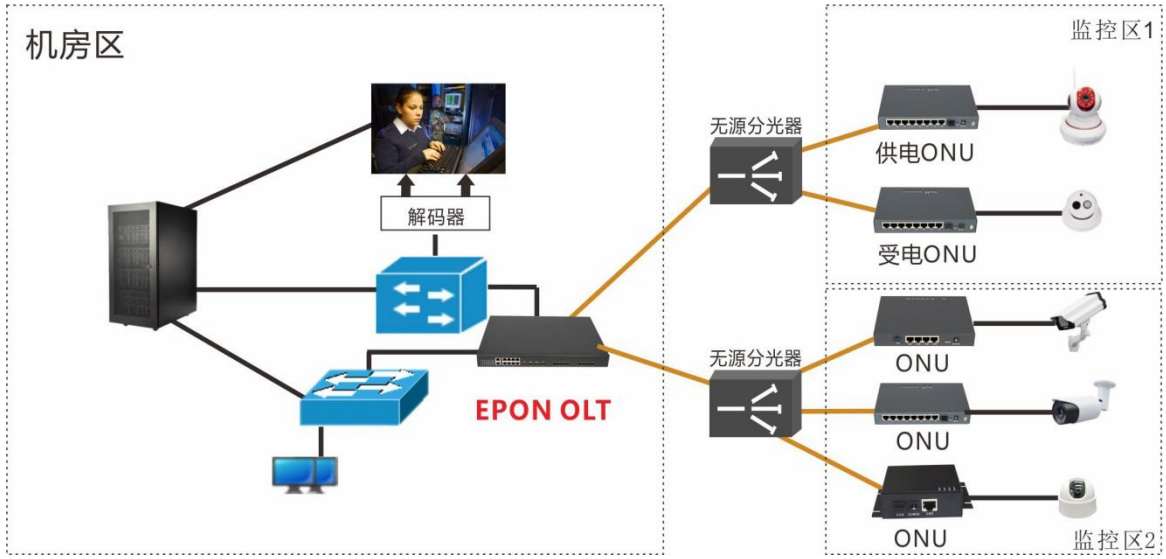
Support 4094 VLAN
>Support 16K MAC address table, support MAC address restriction
>Support port speed limit, support storm suppression
>Support IGMP Snooping, support CTC controllable multicast
Support port isolation
>Support Dysing Gasp
>Support 4 priority queue scheduling, support SP, WRR and SP+WRR scheduling algorithm
>Support OAM, CLI and WEB configuration management
>Support Telnet, support OLT remote and WEB software upgrade

Product specification：

Hardware features	
Business port	Provide 1 pon optical port（SC/UPC）
	Provide 16 10/100Base-T adaptive LAN ports
	Provide a local configuration Console port(RJ45 connector)
Transmission rate	Upstream and downstream 1Gbps transmission rate
Data exchange	Built-in 100M Ethernet switching function
LED indicator	POWER, PON, LOS, RUN, LOOP indicating power、PON registration、Light signal LOS、System operation and loop status
	The LEDs of LAN1～16 ports indicate the LINK and Active status of each LAN port
Power input	100V～240V AC/50Hz～60Hz
Power consumption	< = 15W
Working temperature	-25℃～65℃
Working humidity	5%~95% (non-condensing)
Storage temperature	-40℃～75℃
Storage humidity	75% (maximum)
Size	313mm* 160mm* 44mm
Weight	1.50Kg
Business characteristics	
Ethernet port	Support port MDI/MDIX auto-negotiation
	Support 802.3x flow control
	Support uplink and downlink speed limit for each port
	Support storm suppression

	Support port MAC restriction
	Support port isolation
	Support STP
	Support port mapping
VLAN	Support 802.1Q VLAN
	Support SVLAN
	Support 4094 VLAN
	Support CTC VLAN
Multicast	Support IGMP Snooping
	Support 255 multicast groups
	Support CTC controllable Snooping
QoS	Support flow classification based on source MAC, destination MAC, VLAN priority, VLAN ID, Ethernet frame type, source IP, destination IP
	Support 802.1p, DSCP and TOS
	Support SP, WRR and SP+WRR priority scheduling algorithm
PON port	Compatible with CTC specification
	Compatible with 802.3ah
	Support 4 priority queues and SP scheduling algorithm
	Support Dysing Gasp
Management and maintenance	Support CLI
	Support TELNET
	Support web management
	Support remote or local upgrade of Firmware
	Support remote or local upload and download of configuration files
MAC address learning	Support 16K MAC address table
	Wire-speed MAC address learning
	Support static MAC address
	Support MAC address blacklist
	MAC aging time can be configured

应用方案 1：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。