OLT GPON

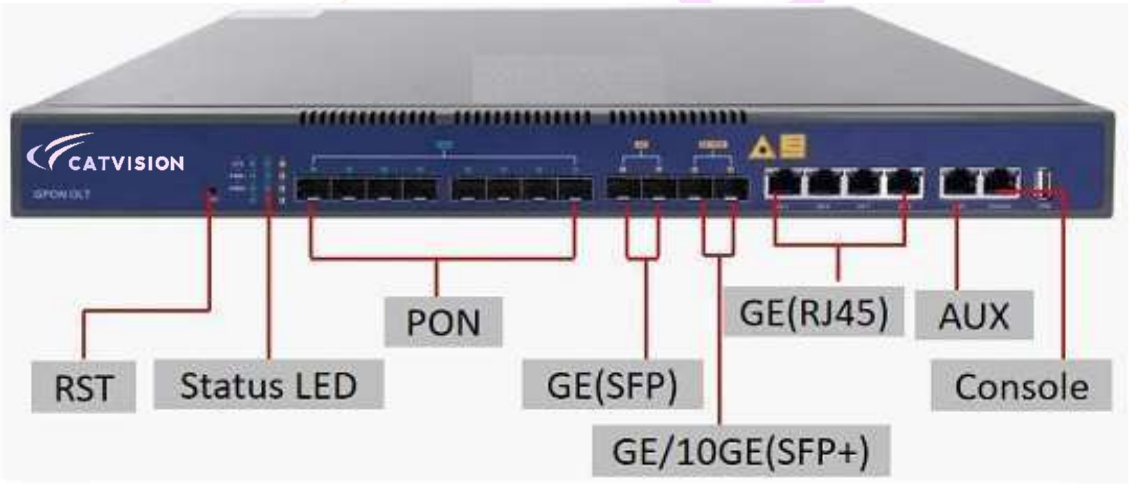
Model: OLT-GPON-804D

Product Overview

GPON (Gigabit Passive Optical Networks) the latest standard of PON access broadband based on ITU-TG.984x, which provides broadband, highly efficient service, and abundant access ports. allowing service providers to offer multiple services on FTTH networks.

OLT provision edge services from edge devices to variety of uplink services like IPTV. OTT. WAN access, Voice over IP and IOT services.

Product Appearance



Key Features

- A Gigabit Passive Optical Network (GPON) Optical Line Terminal (OLT) is a piece of telecommunications equipment that serves as the central point for GPON networks. Some of the features of a GPON OLT are:
- High bandwidth capacity: A GPON OLT can provide high-speed internet connectivity and other services, such as voice and video, to multiple users simultaneously. It offers downstream and upstream speeds of up to 2.5 Gbps and 1.25 Gbps, respectively.
- Multiple ports: A GPON OLT usually has multiple ports to connect to different Optical Network Units (ONUs) that serve individual users or buildings.
- Centralized management: A GPON OLT can manage and control all the ONUs in the network, making it easier to monitor and troubleshoot any issues that may arise.
- Scalability: GPON OLTs are highly scalable and can support up to thousands of ONUs, making them ideal for large-scale deployments.
- Quality of Service (QoS) support: A GPON OLT can prioritize traffic based on the type of service, ensuring that critical services like voice and video are given higher priority.
- Redundancy: A GPON OLT can be designed with redundant components such as power supplies, fans, and control boards to ensure high availability and reliability.
- Security: A GPON OLT can provide various security features such as encryption, access control, and user authentication to protect the network and prevent unauthorized access.
- Remote management: A GPON OLT can be remotely managed and monitored using software tools, making it easier for network operators to manage and maintain the network.

Technical Specifications

For other technical specifications, see the following table:

Product	PON Interface	Uplink	Chipset
804D	8*GPON Port	4×GE(RJ45)+2×GE(SFP)+2×10GE(SFP+)	Broadcom

Functional characteristics

Item	804D GPON OLT
Satisfactory standard	Ø Meet ITU-T G984/G.988 standards Ø Meet China's relevant GPON standards
Easy to Manage	Ø Open to any brand of ONT
Fully open platform	Ø Support static route, Ø Optional Support Dynamic route RIP v1/v2,OSPF v2
High performance cost	Ø 1U height compact design Ø Adopt mainstream chip scheme

Product Feature

Item		804D GPON OLT
Chassis	Rack	1U 19 Inch Standard Box
GE/10GE Uplink Port	QTY	8
	RJ45(GE)	4
	SFP(GE)	2
	SFP+(10GE)	2
GPON Port	QTY	8
	Physical Interface	SFP Slots
	Connector Type	Class C++
	Max splitting ratio	0.130555556
Management Ports		1*10/100BASE-T out-band port, 1*CONSOLE port
PON Port Specification (Class C++ module)	Transmission Distance	20KM
	GPON port speed	Upstream 1.244Gbps, Downstream 2.488Gbps
	Wavelength	TX 1490nm, RX 1310nm
	Connector	SC/UPC
	Fiber Type	9/125μm SMF
	TX Power	+4.5~+10dBm
	Rx Sensitivity	-30dBm
	Saturation Optical Power	-12dBm
Dimension(L*W*H)(mm*mm*mm)		442*220*43.6
Weight(kg)		3
Power Supply	220VAC	AC:100～240V, 47/63Hz
Max Environment	Relative Humidity	5~90%(non-conditioning)

LED Information

LED	ON	Blink	OFF
PWR	The device is powered up	—	The device is powered down
SYS	Device is starting	Device is running normal	Device is running abnormal

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PON1～ PON8	ONT is registered to the PON system	—	ONT is not registered to the PON system or ONU do not connect to OLT
SFP/SFP+	The device is connected to the port	The device is ongoing data transmission	The device is not connected to the port
Ethernet (green-ACT)	—	Port is sending or/and receiving data	—
Ethernet (yellow-Link)	The device is connected to the port	—	The device is not connected to the port

Software Feature

Item		OLT GPON Model OLT-GPON-804D
Management Mode	Ø	SNMP, Telnet, CLI, WEB, SSH v1/v2;
Management	Ø	Fan Group Control;
	Ø	Port Status monitoring and configuration management;
	Ø	Online ONT configuration and management;
	Ø	User management;
	Ø	Alarm management;
Layer 2	Ø	16K Mac address;
	Ø	Support 4096 VLANs;
	Ø	Support port VLAN and protocol VLAN;
	Ø	Support VLAN tag/Un-tag, VLAN transparent transmission;
	Ø	Support VLAN translation and QinQ;
	Ø	Support storm control based on port;
	Ø	Support port isolation;
	Ø	Support port rate limitation;
	Ø	Support 802.1D and 802.1W;
	Ø	Support static LACP,Dynamic LACP;
	Ø	QoS based on port, VID, TOS and MAC address;
	Ø	Access control list;
	Ø	IEEE802.x flow control;
	Ø	Port stability statistic and monitoring;
Multicast	Ø	IGMP snooping;
DHCP	Ø	1024 IP Multicast Groups
	Ø	DHCP server, DHCP relay, DHCP snooping;
Layer 3	Ø	DHCP option82;

	Ø	ARP proxy,2048 hardware Host Routes,2048 hardware Subnet Routes;
	Ø	Support 802.1X,Radius,Tacacs+;
	Ø	Support IP source guard;
	Ø	Support static route;
	Ø	Optional Support Dynamic route RIP v1/v2,RIPng;
	Ø	Optional Support OSPF v2/v3;
IPv6	Ø	Support NDP;
	Ø	Support IPv6 Ping,IPv6 Telnet,IPv6 routing;
	Ø	Support ACL based on source IPv6 address, destination IPv6 address, L4 port, protocol type, etc;
	Ø	Support MLD v1/v2 snooping(Multicast Listener Discovery snooping);
GPON Function	Ø	Tcont DBA;
	Ø	Gemport traffic;
	Ø	In compliant with ITUT984.x standard;
	Ø	Up to 20KM transmission Distance;
	Ø	Support data encryption, multi-cast, port VLAN, separation, RSTP, etc;
	Ø	Support ONT auto-discovery/link detection/remote upgrade of software;
	Ø	Support VLAN division and user separation to avoid broadcast storm;
	Ø	Support power-off alarm function, easy for link problem detection;
	Ø	Support broadcasting storm resistance function;
	Ø	Support port isolation between different ports;
	Ø	Support ACL and SNMP to configure data packet filter flexibly;
	Ø	Specialized design for system breakdown prevention to maintain stable system;
License	ONT Limit	Limit the number of ONT registration, 64-1024, step 64. When the number of ONT reach the max number permit, add new ONT to system will be refused.
Management	Time Limit	Limit system used time, 31days. Equipment trial license, after 31days of running time, all ONTs be set offline.
PON MAC Table		A MAC table of PON, including MAC address, VLAN id, PON id, ONT id, gemport id for easier services checking, troubleshooting.
ONT	Profile	Including ONT, DBA, TRAFFIC, LINE, SERVICE, ALARM, PRIVATE profiles. All ONT features can be configured by profiles.
Management	Auto Learn	ONT automatically discovery, register, online.
	Auto configure	ONT automatically discovery, register, online.
	Auto upgrade	The ONT firmware can be auto upgraded. Download ONT firmware to OLT from web/tftp/ftp.
	Remote config	The powerful private OMCI protocol provides remote HGU configuration including WAN, WiFi, POTS, etc.

EMS Key Features

- Support C/S & B/S architecture
- Support auto topology or modify manually
- Add Trap Server to detect ONT automatically
- EMS can add and configure ONT automatically
- Add ONT position information

❖ Support EMS APP