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16-port GPON OLT

Compact high performance GPON OLT for medium and small operator

P1201-16

Product Overview

TP-Link P1201-16 is a small capacity cassette GPON OLT. It's designed with high performance GPON technology and fully compatible with ITU-T G.984.x and G.988 standards.

TP-Link P1201-16 provide 16 GPON downlink ports, 4 Gigabit Combo uplink ports and 2 10-Gigabit SFP+ uplink ports. Each GPON port supports 1:128 splitting ratio, and totally 2048 GPON ONT connections are supported by one device.

P1201-16 can support full L2 functions such as port aggregation, VLAN, QoS, Multicast and ACL, which can meet the requirements of complex network topology. It is designed with redundant power supply, provides carrier-class reliability, can satisfy the long-distance fiber access requirement for Medium and Small operators. P1201-16 can be used with TP-Link PON Element Management System, user can deploy, manage and monitor their network easily.

Highlights

Compact design provides more flexibility than big chassis for medium and small operators

Supports 1:128 splitting ratio, 2048 ONTs can be supported by one device

Dual redundant power supply design provides carrier-class reliability, supports AC, DC or mixed power input

Complete L2 functions can meet the requirement for different applications

Supports ITU-T G.984.4/G.988 standard OMCI, can manage the ONTs remotely

Provides console and dedicate management port for out-band managements

Supports SNMP, can be managed by TP-Link PON Element Management System

Specifications

Hardware Features	
Service Port	16*PON port (SFP Slot)
Uplink Port	4*Gigabit Combo (RJ45 +SFP) ports
	2*10G SFP+ ports
Management Port	1*RJ45 Console port
	1*USB Type-C Console port
	1*100/1000BASE-TX out-band management port
Fan Quantity	3
Redundancy Design	Dual power supply
	Support AC, DC, AC+DC power input
Power Supply	AC: 100V~240V, 50/60Hz
	DC: -36V~-72V
Power consumption	Max. 70W
Weight	4kg
Dimensions	440mm(L)*300mm(W)*44mm(H)
Environment	Operating temperature: 0℃~50℃
	Storage temperature: -40℃~85℃
	Operating Humidity: 5%~90% non-condensing
	Storage Humidity: 5%~90% non-condensing

GPON Port Attribute	
Max. splitting ratio	1:128
Transmission distance	20km
Data rate	Downstream: 2.5Gbps
	Upstream: 1.25Gbps
Wavelength	Tx: 1490nm
	Rx: 1310nm
Interface type	SC/UPC
Fiber type	9/125μm SMF (Single Mode Fiber)
Tx power	Class B+: 1.5dBm~5dBm
	Class C+: 3dBm~7dBm
Rx sensitivity	Class B+: -28dBm
	Class C+: -30dBm
Saturation power	Class B+: -8dBm
	Class C+: -12dBm

Specifications

Software Features		
PON Features	Compatible with ITU-T G.984.x, G.988 standards	
	Standard OMCI management function	
	Support 1:128 splitting ratio for each PON port	
	Support AES 128 encryption for uplink and downlink data transmission.	
	DBA algorithm, support 5 DBA types	
	Support 128 DBA profiles	
	Support 512 ONT line profiles	
	Support 512 ONT service profiles	
	ONU management (remote configuration, upgrade, monitor)	
	ONU authentication	
Port	Port enable/disable	
	Speed and duplex mode configuration	
	802.3x flow control configuration	
	Broadcast/Multicast/Unicast storm control	
	Port mirror	
MAC Address	MAC address table: 64K	
	Aging time configuration	

Software Features	
MAC Address	Support 64K MAC address limits
	Support 1K Static MAC address
	Support 256 black hole MAC address
Spanning Tree	RSTP
LACP	Support 802.1ad link aggregation
	Maximum 16 trunk groups
	Maximum 8 ports per group
	Load balance based on S-MAC, D-MAC, S-IP, D-IP
DHCP	DHCP Client
	DHCP snooping
VLAN	VLAN ID: 1~4094
	4094 active VLANs
	Support 802.1q VLAN
	The ports support Access, Trunk and Hybrid mode
	Support PVID configuration
	Support QinQ
	Support VLAN translation
Multicast	2K IGMP groups
	Support IGMP v1/v2 snooping

Specifications

Software Features

Multicast	Support IGMP fast leave
	Support IGMP snooping querier
	256 Multicast VLAN
QoS	Support 802.1p QoS
	4 priority queues
	DBA algorithm, support 5 DBA types
ACL	Support 4000 ACL rules
	Support basic ACL, advance ACL and link ACL
	Basic ACL: source IP
	Advance ACL: source IP, destination IP, source port, destination port, DSCP and IP message type
	Link ACL: source MAC, destination MAC, VLAN ID, Ethernet type
	Support 802.1p priority, VLAN ID, TOS, DSCP remark
Virtual Service Port	Support 8101 virtual service ports
Management & Maintenance	Support CLI management
	Support EMS management based on SNMP
	Support Web management
	Console port, Management port

Software Features

Management & Maintenance	Inbound and outbound management
	Operation Status monitor
	3 levels account management(guest/admin/root)
	Configuration backup and load
	Support dual image
	Firmware upgrade through FTP/TFTP
	Log management
	Real-time statistic
	OLT and ONT optical module diagnostics

Ordering Information

Part Number	Description
P1201-16	16-port GPON OLT, with dual AC input power supply
PLT12-C+	GPON OLT SFP optical module, Class C+