Ver. 1.0

FTTx series products • OLT-1408 Series

Technical Specification

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CONTENT

1.0 PRODUCT DESCRIPTION

OLT-1408's Optical Line Terminal (OLT) adopts GiGA Ethernet Passive Optical Network (EPON) technology. It is a compact chassis with L2/L3 GiGA switching and routing function. All the functional components are modularized design and it supports hot-plugging with plugging and playing. 1~4 pieces of GiGA optical port or electrical port are optional in the uplink port, which provides a direct optical interface for the Ethernet/IP network core. 1~8 pieces of EPON optical port are optional in the down link port. Through a passive optical Network (PON), an optical Network unit link (ONU),it can provide final transmission with bandwidth up to 1Gbps for the user.

OLT-1408, with the telecommunication-grade safe reliability and network management, also combines with the flexibility, high speed and economical efficiency of the EPON network-building. Besides, based on the high quality and high P/P ratio of Huatai products, it is an optimal transport platform for triple-play service in FTTx fiber access network.

2.0 PRODUCT FEATURE

Accord with IEEE802.3ah standard, speed: EPON.

Each EPON port supports 1:64 split (10km transmission).

Supports 1:32 split (20km transmission).

Compact 1U chassis, supports 512 ONU.

Modularized design, flexible choice of port type, 16km transmission, and can meet customers' different needs.

Advanced L2/L3 switching and routing function, abundant L2/L3 business.

QoS support: IEEE802.1p, IP Precedence, DSCP IP.

ONU client's authentication, DBA dynamic bandwidth allocation, ACL access control, MAC address limit, support OAM.

With AES-128 encryption.

Support multicast of IGMP Snooping video streaming.

Carrier-class safe reliability and NM. Remote diagnosis, control, and recombination.

Excellent price-performance industry

3.0 MAIN APPLICATION

Triple-play

FTTH, FTTP

4.0 Technical index

Chassis	Size: 443mm(W)×272mm(L)×43.6mm(D)
	Weight: 12 pound
Power supply	Option 2 piece redundant -48V DC. (allowance :-36～-72V input)
	Option 1 piece 110/220V AC. (allowance: 85~264V input)
	Power consumption: 140W
Fans tray	1 Fans tray (built-in 3 fans), cooling forcibly for GSM board
GSM system control board	Function: band-in, band-out management, uplink down link switch and syntaxes
	Uplink: plug gable 4 Giga Ethernet SFP optical / electrical port
	MGNT port: RJ45 port supports 10/100Base-T band-out management
	CONSOLE port: RJ45 port provides system diagnosis
	COM port: RJ45 port provides alarm communication
LMT (Line Module Terminal)	Plug gable 2 LMT modules, power consumption ≤100W
	1 LMT can be plug gable 4 SFP media converter, single board power consumption ≤30W
	Each OLT port (SFP MC), after splitter, supports 64 ONU
	Compliance: IEEE802.3ah
	Fiber: single mode (SFP, Single Mode Fiber) connector: SC/APC
	Speed: 1Gbps(uplink down link)
	Optical wavelength: transmitter (TX): 1490nm, Receiver (RX): 1310nm
	Link loss: 29dB
	ONU subscriber approval :IEEE802.1X
	Quality of service (QoS):IEEE802.1p
	Dynamic bandwidth allocation (DBA): each ONU subscriber max bandwidth and ensure B/W allocation

5.0 ADVANCED FEATURES

Layer 2 switching functions	Non-blocking line rate switching
	Layer 2 IGMP
	Port based VLAN, protocol based VLAN and 802.1q VLAN
	IEEE 802.3ad link aggregation (trucking) and load balance
	Packet mirroring per ingress/egress port
	STP/RSTP (IEEE 802.1D) support
	16K MAC table support
	MAC management (Learning control, limit and aging) support
	802.1X support for ONU AAA
Layer 3 routing functions	L3 switching and full line speed support
	Static Route, OSPF, ECMP support
	PIM-SM, IGMP v2
	ARP support (static ARP, proxy ARP per RFC1027, ARP per RFC826)
	TCP/IP, ICMP per RFC792 support
Quality of service (QoS) and security	Up to four QoS queues per subscriber
	IEEE 802.1 p
	IPv4 TOS priority
	Egress rate shaping
	Dynamic Bandwidth Allocation (DBA)
	Access Control List (ACL)
User authentication	IEEE 802.1x/Radius
System management	FTP, SNMP v1 & v2c, DHCP, Telnet, console interface with CLI
	In-Band/Out-of-band management
	Environmental monitoring

6.0 PRODUCT SERIES

	Module	Product description	Interface	Wavelength	Distance
Uplink transceiver options	SFP-1G1/100M	10M/100M/100M adaptive electrical interface module	RJ45	copper	100m
	SFP-1G/100M	Fixed Gigabit port module stores	RJ45	copper	100m
	SFP-LC/550M-850	Gigabit multimode optical interface module	LC	Tx:850nm	550m
	SFP-LC/10-1310	Gigabit single-mode optical interface module	LC	Tx:1310nm	10Km
	SFP-LC/20-1310	Gigabit single-mode optical interface module	LC	Tx:1310nm	20Km
	SFP-LC/80-1310	Gigabit single-mode optical interface module	LC	Tx:1310nm	80Km
	SFP-LC/120-1310	Gigabit single-mode optical interface module	LC	Tx:1310nm	120Km
Downlink EPON transceiver options	SFP-SC/20-EPON	EPON OLT transceiver module	SC	Tx:1490nm Rx:1310nm	20Km

7.0 MODEL EXPLANATION