



8 EPON Ports

Support 512 ONUs

V1.1.5

IEEE802.3ah  
EPON OLT

1.25Gbps  
Downstream

Layer 3  
switching  
chipset

4\*10GE  
uplink ports

Web  
management

### SNA8800TW 8 Ports GEPON OLT:

The SNA8800TW is a GEPON OLT system based on IEEE802.3ah Gigabit EPON standard. It comes with 8 GEPON ports, which can connect up to 512 GEPON ONUs at 1:64 Fiber Splitting Ratio. It is a Telecom Grade GEPON OLT system designed for ISPs deploying Triple Play Gepon networks to offer high quality Internet Data, Voice and IPTV services ( such as IPTV, VoIP and Data Transmission services) to Subscribers.

### Main Characters

- Support 8 GEPON SC ports, 1.25Gbps transmission rate.
- Support 8\*10/100/1000Base-Tx uplink interfaces
- Support 4 10G\* SFP uplink interfaces or 4\*10/100/1000/10000 Base-Tx
- can connect up to 512 GEPON ONUs at 1:64 Fiber Splitting Ratio
- Use the three-layer Ethernet switching chipset, exchange capacity is 128Gbps.
- Provides console port, out -band and in-band network management interface
- Support WEB configuration management
- Support CLI configuration management and SNMP network management systems
- power consumption is 60W.

- Support DBA Dynamic Bandwidth Assignment, bandwidth granularity is 64Kbps.
- Support ONU automatic MAC binding and filtering
- Support ONU offline business configuration, Support Automatic configuration
- Support PON port isolation, Support encrypted Triple Churning
- Support 4096 VLAN additions, transparent transmissions, and transformations, support VLAN stack (QinQ)
- Support 32K MAC line speed learning and aging, support port MAC address limitation
- Support IEEE 802.1d (STP) and 802.1w (RSTP) Spanning Tree Protocol
- Support IGMP v1/v2 Snooping and Proxy, support CTC controlled multicast
- Support priority queue scheduling, support SP, WRR, or SP+WRR scheduling algorithm
- Support port speed limit, support data packet filtering
- Supports port mirroring and port aggregation
- Provides logging, alarm and performance statistics
- Support WEB configuration management
- Support SNMP v1/v2c network management

## Technical Parameters

### EPON Parameters

Support IEEE802.3ah Gigabit Epon standard  
Support 20Km transmission distance over Single Fiber  
Support 8 Gepon downstreaming ports, support 1:64 fiber splitting ratio, can connect up to 512 ONUs  
Support encrypted Triple Churning for upstreaming and downstreaming  
Support China Telecom Standard CTC 2.0, 2.1, 3.0  
Support DBA Dynamic Bandwidth Assignment,  
Support ONU auto detection and reporting illegal ONU registrations  
Support auto-inspection for received optical fiber power.  
Support 1.25Gbps GEAPON transmission, Wavelength of Gepon SC: Uplink: 1310nm, Downlink: 1490nm  
Support CATV over EPON application, CATV wavelength at 1550nm.  
Average Optical Transmitting Power for the Gepon SC Port: +2dbm to +7dbm  
Optical reception sensibility of the Gepon SC Port: -30dBm  
Max Optical Fiber Ratio: 1:64 at 20Km transmission distance  
Support Standard OAM and expandable OAM management features  
Support upgrading ONUs remotely in batches.

### Hardware Parameters

Fully Compatible with IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3ah standard  
Support 8 GEAPON SC ports, 1.25Gbps transmission rate.  
Support 8\*10/100/1000Base-Tx uplink interfaces  
Support 4 10G\* SFP uplink interfaces or 4\*10/100/1000/10000 Base-Tx  
Support EAPS fast loopback protection and GEAPON Optical Path protection.  
MAC address table: 32K  
VLAN Table: 1-4096  
Power Supply: Main Power Supply + Backup Power supply  
AC Power Supply: AC: 90~264V, 50/60Hz  
DC: -36~-72V  
SNA8800TW 8 Port OLT chassis height: 1U

**Hardware Specifications:**

Item	SNA8800TW
Service Interface	Support 8 PON ports
	Provide 4*10G uplink ports
	Provide 8 GE RJ 45 uplink ports(10/100/1000Base-T self-adaption )
Management configuration interface	Provide 10/100Base-T RJ45 out- band network management interface
	In-band management can be any uplink port
	Provides console port
Data exchange	Use the L3 Ethernet switching chipset, exchange capacity is 128Gbps,
LED	RUN, PW1 and PW2 indicate system operation and power working status.
	PON1 to PON8 indicate the LINK and Active status of 8 PON ports.
	GE1 to GE8 indicate the LINK and Active status of 8 GE RG45 interfaces.
	XGE1 to XGE4 indicate the LINK and Active status of the 4 10GE interfaces.
Power supply	220V /1A Ac power input ( Select the power supply devices according to the requirements of AC or DC, single or dual power supply )
	Typical power consumption is 60W.
Weight	4.6 Kg
Working	0~55℃
Dimension	300.0mm (Length) * 440.00mm (Width) * 44.45mm (Height)

Characteristics	
EPON standard	IEEE802.3ah, YD/T 1475-2006 and CTC 2.0/ 2.1/3.0 standard
Dynamic Bandwidth Assigination (DBA)	Support fixed bandwidth, guaranteed bandwidth, maximum bandwidth, priority and other SLA parameter Settings.

	Bandwidth granularity is 64Kbps.
Security features	Support AES and encrypted Triple Churning of PON port
	Support MAC address binding and filtering of ONU.
VLAN	Support 4096 VLAN additions, transparent transmissions, transformations, and deletions.
	Supports VLANs based on ports, MAC addresses, protocols, and IP subnets.
	Support VLAN stack (QinQ)
MAC address learning	Supports 32K MAC addresses
	MAC address learning based on hardware line speed
	MAC limitations based on port, VLAN, link aggregation.
Spanning Tree Protocol	Support IEEE 802.1d (STP) and 802.1w (RSTP) Spanning Tree Protocol
Multicast	Support for IGMP Snooping and IGMP Proxy, support CTC controlled multicast.
	Support IGMP v1/v2
NTP Protocol	Support NTP protocol
QOS	Support 802.1p priority queue scheduling.
	Support SP, WRR, or SP+WRR scheduling algorithm.
Access Control List (ACL)	Set up rules of ACL according to destination IP, source IP, destination MAC, source MAC, destination protocol port number, source protocol port number, SVLAN, DSCP, TOS, Ethernet frame type, IP priority, IP packet priority protocol type.
	Support packet filtering using the above ACL rules.
	Support to use the above ACL rules for Cos setting, IP priority setting, mirroring, speed limit and redirection application.
Flow control	Support IEEE 802.3x full duplex flow control.
	Support port speed limit.
Link aggregation	Support 8 ports aggregation groups, each group supports 4 member ports.
Port mirroring	Support the port mirroring of the uplink interface and PON port.
Logging	Supports logging output masking at alarm level.
	Support logging output to terminals, files, and log servers.
The alarm	Support 4 alarm levels (serious, important, secondary and warning)
	Support 6 alarm types (communication, service quality, error handling, hardware equipment and

	environment)
	Support alarm output to terminal, logging and SNMP network management server.
Performance statistics	Performance statistics sampling time is 1 ~ 30 seconds.
	Support the 15-minute performance statistics of the uplink interface, PON port, and ONU user ports.
Management of maintenance	Support OLT configuration saving and restore factory Settings.
	Support OLT online upgrade.
	Support offline service configuration and automatic configuration of ONU.
	Support remote upgrade and batch upgrade of ONU.
Network management features	Support local or remote CLI management configuration.
	Support SNMP v1/v2c network management, support out-band and in-band network management.
	Support the "EPON+EoC" SNMP MIB specification of the radio and television industry, support the automatic discovery protocol of EoC head end(BCMP).
	Support WEB configuration management.
	Open for third party network management MIB

### Order Information

Model No.	Product Description
SNA8800TW	SNA8800TW EPON OLT, with 8*EPON Ports, 4*10GE SFP and 8 GE RJ45 uplink ports