

# SNA8800T 8 Port Gepon OLT

## Optical Line Terminal OLT



The SNA880T is a GEAPON OLT system based on IEEE802.3ah Gigabit EPON standard. It comes with maximum 8 GEAPON ports, which can connect up to 512 GEAPON ONUs at 1:64 Fiber Ratio. It is a Telecom Grade GEAPON OLT system designed for ISPs offering high quality, high speed and high stability internet services( such as IPTV, VoIP and Data Transmission services) to Subscribers.

## SNA8800T 8 is a Gepon OLT

### Main Advantages:

Generally, a normal 8 port GEAPON OLT supports only layer 2 access network features. But unlike the normal GEAPON OLT, the SNA8800T supports rich Layer 2, 3, 4 network features which enables you apply it in Layer 2 access network and in Layer 3 aggregation network.

Support layer 2/3/4 network features, enables you apply it in Layer 2 access network and Layer 3 aggregation network.

Support 1:64 Fiber Ratio at 20Km transmission distance, can connect up to 512 remote ONUs.

Comes with plain PCBA design, fixing GEAPON downlink ports and 1G uplink ports on board, saving installation space.

Support optional 10G uplink ports, enables ability of enlarging bandwidth by changing only Fiber SFP transceivers.

Support main power supply and backup power supply work in 1+1 mode, ensuring high stability of network.

Support DC Power supply, suitable for applying in ISPs's server room.

Support CLI command and OAM management, support OAM alarms of ONU failure events.

Support CTC2.0, 2.1 and 3.0 completely, enables high compatibility with ONUs from different brands.

Support Quick Network Recovery, Network resumes in less than 50ms in case of server and device reboots.

Support SNMP V1, V2, V3, Telnet or NMS management, enables remote management, remote problem detects and remote problem solving of SNA8800T GEAPON OLT and the registered ONUs.

### Main Features:

#### Gepon Technology based on IEEE802.3ah standard:

The SNA8800T comes with plain PCBA board design, support max 8 GEAPON SFP ports.

Support IEEE802.3ah Gigabit Epon standard,

Support Data Encryption, can encrypt data packets transmitting over GEAPON network.

Support Fiber protection in backbone level, 1+1 protection that enables Network recovery within 50ms

Support a max of 8 Gepon SFP Transceivers for downlinking, can connect up to 512 ONUs

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 CTC 2.0, 2.1 and 3.0 Telecom Gigabit Epon standard,

Support Standard OAM and expandable OAM management features

Support upgrading a single ONU or to multiple ONUs simultaneously and remotely by the System administrator

### Technical Parameters

#### Software Features:

The SNA8800T supports layer 2/3/4 networking features:

Support IEEE802.1Q VLAN, Port Based VLAN, GVRP and QinQ VLAN Stacking,

Support IEEE802.1D Spanning Tree, IEEE802.1W Rapid Spanning Tree, IEEE802.1s Multiple Spanning Tree

Support IEEE802.3ad Link Aggregation,

Support IEEE802.3X Half Duplex and Full Duplex Backpressure Flow Control

Support IEEE802.1P QOS, COS, DifferSev, FIFO (First In First Out), DBA (Dynamic Bandwidth Assignment), SLA,

Support L2, L3, L4 ACL (Access Control List), IP based ACL rules, data filters by source/destination IP, layer-3 IP Identity, layer-4 TCP/UDP Identity, IP priority, ToS or time based ACL rules.

Support Bandwidth Control

Support Multicast: IGMP V1, V2, V3, IGMP Snooping, Multicast VLAN,

Support Cli, Telnet, SNMP V1, V2, V3

Support Layer 3 Routing features, such as RIPV1, V2, OSPF V4, Static route, OSPF, BGPv4

## Hardware Features:

Fully Compatible with IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3ah standard

Support 8 GEPON SC ports, 1.25Gbps transmission rate.

Support 8\* Gigabit SFP uplink interfaces, and/or 2\*10G SFP+ uplink interfaces

1U Chassis with Cooling Fans equipped inside

Support Hot Swap of GEPON SFP Transceivers

Support EAPS fast loopback protection and GEPON Optical Path protection.

MAC address table: 32K

VLAN Table: 1-4094

Power Supply: Main Power Supply + Backup Power supply

AC Power Supply: AC: 90~264V, 50/60Hz

DC: -36~-72V

## Technical Specification:

Model NO.	SNA8800T		
Hardware	Hardware Capacity		
	Hardware Standards	IEEE802.3, IEEE802.3u, IEEE802.3z, IEEE802.3ah standard	
	GEPON Ports	8 GEPON SC ports	
	Uplink Ports	8 Gigabit SFP Slots, and/or 2*10G SFP+ interfaces	
	Cooling System	1U Chassis with Cooling Fans equipped inside	
	Switching Capacity	128Gbps	
	MAC Address Table	32K	
	VLAN Table	801345	
	Hot Swap	Support Hot Swap of GEPON SFP Transceiver	
	Flash	128Mb	
	Memory	1Gbps	
	Routing Table	12K	
	Power Supply	Redundant Power Supply: 110-240V AC, 50/60Hz	
		Support optional DC Power Supply	
		Power Consumption: <100w	
	Gepon Characters	Support IEEE802.3ah Gigabit Epon standard,	
		Support a max of 8 Gepon SC ports for downlinking, can connect up to 256 pcs of Subscriber ONUs	
		Support the transmission rate of 1.25Gbps	
		Wavelength of Gepon SC ports: Uplink: 1310nm, Downlink: 1490nm	
		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	
Support CTC 2.1 China Telecom Gigabit Epon standard			
Support Standard OAM and expandable OAM management features			
Support Encryption for uplinking and downlinking data			
Support upgrading a single ONU or to multiple ONUs simultaneously and remotely by the System administrator			
Support ONU authentication, can report illegal ONU registering events			

Software	Protocols	IEEE802.1Q, IEEE802.1P, IEEE802.3X, IEEE802.3ad, IEEE802.1D, IEEE802.1W, IEEE802.1S,
	VLAN	GVRP, IEEE802.1Q VLAN, Port Based VLAN, QinQ VLAN Stacking, 1-4094 VIDs.
	QOS	IEEE802.1P QOS, 8 Queues per port, ToS, Port ID based QOS, DifferSev, WRR, SP, SWRR, Traffic Shapping, Flow Classification with ACL VLAN.
	Spanning Tree	IEEE802.1D Spanning Tree, IEEE802.1W Rapid STP, IEEE802.1S Multiple STP
	L3 Routing	RIP 1/2, OSPF, BGP4 and Static Routing, max 12K routing table
	Multicast	IGMP V1, V2, V3, IGMP Snooping,
	Access Control List	L2, L3, L4 ACL (Access Control List), IP based ACL rules, data filters by source/destination IP, layer-3 IP Identity, layer-4 TCP/UDP Identity, IP priority, ToS or time based ACL rules.
	MAC Filter	Port binding to MAC, Whitelist/Blacklist MAC Filtering
	Flow Control	Half-duplex backpressure and 802.3x full duplex, Head of Line (HOL) flow control
	ARP	Support ARP Proxy
	DHCP	Support DHCP Client, DHCP Server, DHCP Relay
	L3 Aggregation	Support Load Balance and LACP based L3 Aggregation
	Authentication	Support AAA Radius and Local Authentication
	Port Mirroring	Flow or Port based Mirroring
	Storm Control	Broadcast and Multicast Storm Control
Reliability	Ensuring reliability with VRRP (Virtual Router Redundancy Protocol)	
Management	Console	RS232
	Telnet	Support CLI commands for Telnet management
	SNMP	Support SNMP V1, V2, V3
	Syslog	Support Syslog
	RMON	Support RMON Group 1, 2, 3, 9
	MIB	Support Private and Public MIB
Working Environment	Humidity	Working: 10%~90% non-condensation / Standby: 5% to 95% non-condensation
	Work Temperature	Working: 0°C to 65°C / Standby: -20°C to 70°C