



ITU-T G.984.x  
GPON/IEEE802.3ah  
GEPON standard

1.25G upstream  
2.5G/1.25G downstream

ZTE Chipset

IPv4

802.1P QOS  
DBA

Datasheet V1.1.6

### SDN6501GZ 1 GE Dual Mode ONU:

The SDN6501GZ is an ITU-T G.984.x based and IEEE802.3ah based dual mode ONU that supports 2.5G downstream and 1.25G upstream bandwidth for GPON and supports 1.25G downstream and 1.25G upstream bandwidth for GEPON. It supports dual mode (GEPON and GPON), can access GEPON/GPON OLTs.

### Main Features:

- ITU-T G.984.x GPON standard, compatible with Huawei, ZTE, Fiberhome, CHIMA GPON OLTs
- IEEE802.3ah GEPON standard, compatible with Huawei, ZTE, Fiberhome, CHIMA GEPON OLTs.
- Offers 1 G/EPON WAN Port, support 1.25G upstream and 2.5G/1.25G downstream
- Offers 1 GE LAN Ports, can be configured in Bridge mode
- Max 1:128 Fiber ratio for GPON, max transmission distance can reach 20km
- Max 1:64 Fiber ratio for GEPON, max transmission distance can reach 20km
- Support FBA( Flexible Bandwidth Assignation),dynamic assign bandwidth automatically
- High security, data encrypted at upstream and downstream directions
- Support Multicast, end users can optionally apply for VOD, Video conferencing, etc.
- Easy installation and Maintenance, support remote failure detect and locate. Saving your maintenance costs.
- Support Dynamic Bandwidth Allocation (DBA), Smarter bandwidth assignment and usage.
- Support OMCI Management, manage subscribers remotely.
- Supports IPv4, highly applicable in both IP type based networks.

**Hardware Features:**

- Built with ZTE ZX279125,600Mhz CPU, 64Mbits Flash,256Mbits RAM
- Fully Compatible with ,ITU-T G.984.x , IEEE802.3ah CTC 2.1, CTC 3.0 standard
- Offers 1\*G/EPON SC Port, 2.5G / 1.25G Downstream, 1.25G Upstream
- Sensibility of GEPON Optical port: -27dBm
- live LED Indicators for Power, PON, LOS and LAN
- Desktop design, Plastic housing,
- Plug and Play operation
- External Power Supply
- Impulse Power Supply, AC 96V-260V input, DC 12V,0.5A OUTPUT
- Support Asia, Europe, U.S, U.K, AU standard power plugs

**Software Features:**

- Support WAN connection in Bridge mode
- Support Static IP, PPPOE, Firewall
- Support IEEE802.1Q VLAN, Port Based VLAN
- Support IEEE802.1P QOS, TOS, COS
- Support IEEE802.1d Spanning Tree
- Support IEEE802.1W Rapid Spanning Tree
- Support MAC address translation and MAC addresses limitation
- Support IGMP V1, V2 and IGMP Snooping for multicast
- Support IEEE802.3X full duplex, half duplex backpressure flow control
- Support MAC, IP, or TCP/UDP protocol based ACLs (Access Control protocol)
- Support Bandwidth Control
- Support CLI management, SNMP based NMS management and Monitor

**Interoperable GEPON Models**

- **CHIMA** SNA8800T, SNA9000T series GEPON OLT
- **HUAWEI** MA5680T, MA5606T, MA5683T GEPON OLT
- **ZTE** C220, C300 GEPON OLT
- **Alcatel Lucent** 7342, 7360 ISAM GEPON OLT
- **Fiberhome** AN5516-01, AN5516-02 GEPON OLT
- **Ericsson** BM1500 GEPON OLT
- **Aurora** Trident7, T7-PIM-8802/COLT GEPON OLT
- **Dlink** DPN-3012-E GEPON OLT
- **Ubiquoss** C9500, C9516, C9016, C9264 GEPON OLT
- **Raisecom** ISCOM5508,ISCOM5800E, ISCOM6800 GEPON OLT
- **H3C** S3600-2P-OLT,S7502E,S7503E,S7506E,S7510E,S7506E-V GEPON OLT

**Interoperable GPON OLT Models**

- CHIMA SNA8800, SNA9000T series
- Huawei MA5680T, MA5683T OLTs
- ZTE C200, C220, C300 series OLTs
- Fiberhome AN5516-01, AN5516-02 GPON OLT
- ERICSSON BM1500 GPON OLT
- ZHONE MA-180/280.MXK319.819.823  
MXK-F1419,MXK-F1421

**Specifications:**

Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3ah, IEEE 802.3x, IEEE 802.1Q, IEEE 802.1P, IEEE 802.1D, IEEE 802.11b/g/n, ITU-T G.984.1, ITU-T G.984.2, ITU-T G.984.3, ITU-T G.984.4		
Topology	Star Topology		
GPON/GEPON mode	Dual mode, can access GPON/GEPON OLTs		
Soft mode	Can be configured in Bridge mode		
Uplink Port	1 G/EPON SC Uplink port, SC/UPC or SC/APC connector		
PON Transmission Distance	Up to 20Km		
Downlink Port	1*10/100/1000Base-Tx Gigabit LAN		
LED Indicators	Power, PON, LOS, GE,		
Ethernet Cable	10Base-Tx: UTP category 3, 4, 5, up to 100m 100Base-Tx: UTP category 5, up to 100m 1000Base-Tx: UTP category 5, 5E, 6, up to 100m		
Fiber Cable	8.3μm, 8.7μm, 9μm and 10μm single mode fiber cable		
Power Supply	AC 96-260V, DC 12V, 0.5A, External Power Supply		
Temperature Humidity		Temperature	Humidity
	Working	0°C - 45°C	10% - 90%
	Standby	-40°C - 70°C	5% - 90% RH

**Order Information**

Model NO.	Description
SON6501GZ	1GE GEPON ONU
SGN6501GZ	1GE GPON ONU
SDN6501GZ	1GE Dual Mode ONU