

## GP-2508 GP-2516 OLT

### Benefits

- Standalone GPON solution
- 8 or 16 GPON ports
- Compact 1U/19" design
- Up to 2,048 OLT users
- High speed 2.5 / 1.25 Gbps
- Guaranteed QoS and SLA
- Fully featured Layer 2 and Layer 3 protocols
- Secured communications: isolation, encryption, ACL
- Redundant AC and DC power supplies and low power consumption
- Very fast time to operation and easy management
- Complete range of NTU offering including 11ac and CATV
- Applications: local ISP with Triple-Play services, Enterprises, Hospitalitys, Industries

### PRODUCT OVERVIEW



**GP-2500** is a standalone **GPON OLT** providing **8 or 16 GPON** interfaces, 8x Gigabit and 4x 10-Gigabit up-link ports in a compact 1U/19" and low power package. It complies with the latest GPON ITU-T G984 / G988 standards and delivers 2.5GE / 1.25GE high speed Triple-Play services.

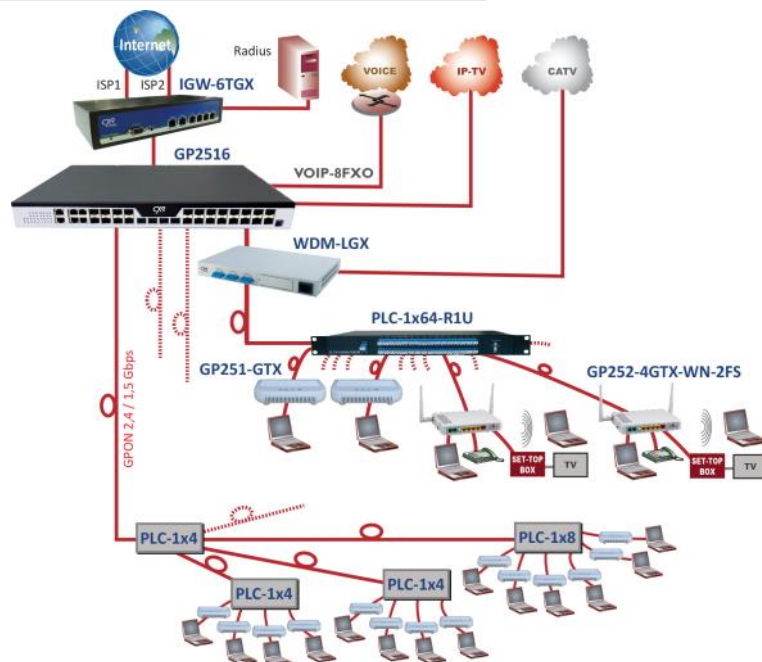
GP-2500 is perfectly serving the requirements of **local Service Providers, Enterprises, Communities and Hospitalitys** with high performance, secured and cost effective fiber access. It embeds high bandwidth and low latency switching ASICs with a full set of QoS, VLAN, routing and ACL features to enable guaranteed Service Level Agreement (SLA) to each user.

GP-2500 **suits both standalone and large network requirements** thanks to a choice of management options from either a user friendly web interface or a Network Management Software. The network operation is controlled with a click of a mouse on a clear graphical interface.

GP-2500 preserves **network security** and user's excellent **quality of experience** through consistent SLA and security features.

GP-2500 offers the **best values for price** with unequalled performances, flexibility and scalability. Its easy deployment, resiliency and extensive management functionalities enable significant CAPEX and OPEX reductions.

### APPLICATION



**GP-2500** connects up to 2,048 OLT users and provides high throughput Ethernet access on a GPON cost-effective infrastructure. GP-2500 works as a standalone and plug and play solutions or it may be part of a larger access network with a NMS platform. CXR GPON OLT's provide users with Triple Play services with Gigabit Ethernet, Wi-Fi, VoIP and CATV interfaces.



GP-2508 GP-2516 OLT

ONT

GP251 GP252 GP253  
GP254 GP255 GP256

## OLT SPECIFICATIONS

- **System Capacity**  
Maximum coupling ratio : 1:128  
Backplane bandwidth : 205 Gbps  
Mac Table capacity : 64K
- **Interfaces**  
GPON : 8 or 16 GPON ports  
Uplink interfaces : 4 Gigabit SFP ports,  
4 Gigabit combo ports, 4 x 10GbE SFP+  
ports
- **Attribute of the PON interface**  
The transmission rate with downlink  
2.5Gbps / Uplink 1.25Gbps  
Class B+ and class C+ GPON Module  
Security : ONU authentication  
mechanism
- **Standards**  
ITU-T G.984/G.988  
IEEE 802.1D, Spanning Tree  
IEEE 802.1Q, VLAN  
IEEE 802.1w, RSTP  
IEEE 802.3ad physical link static/  
dynamic aggregation (LACP)  
Ethernet-II
- **QoS**  
Backpressure flow control (half duplex)  
IEEE 802.3x flow control (full duplex)  
IEEE 802.1p, CoS  
WRR, SP and FIFO queue schedule  
Limiting the uplink/downlink rate based  
on each ONU  
DBA and SLA
- **VLAN**  
Port-Based VLAN  
QinQ and flexible QinQ
- **Multicast**  
L2 Multicast  
IGMP Snooping  
MLD Snooping
- **Layer-3 routing functions**  
Static routing, RIP and OSPF, OSPF/  
OSPFv3
- **Reliability**  
Unidirectional Link Detection (UDLD)  
Hot swap of the GPON optical module  
on the expanded slot  
GPON optical path protection (b/c, hand  
-in-hand)  
Abnormal luminescence ONU detection  
such as long luminescence
- **Network Security**  
Per port user limiting  
Port isolation  
Packet storm control  
Flow-based ACL access control function  
Transmission data encryption on the  
PON interface
- **Configuration Management**  
Web, CLI, SNMP, Telnet  
TFTP for software upgrade  
Debug Output
- **Physical characteristics**  
Dimensions mm (WxDxH):442.5x304x44  
Weight : 5.25 kg
- **Environment**  
Operating temperature: 0°C to 45°C  
Hygrometry: 10-85% non-condensing  
Storage temperature: -40°C to 80°C  
Storage hygrometry: 5-95% non-  
condensing
- **Power supply**  
Two power slots, redundant and hot-  
swappable  
GP2500-AC: 110-230 Vac, 50-60 Hz,  
150 W  
GP2500-DC: 40-56 Vdc, 150 W

## GP251 TO GP256 GPON ONT ETHERNET WI-FI VOIP CATV

**CXR GP251 to GP256** are new generation smart ONT with 1 or 4 Gigabit Ethernet ports, 802.11N or 11AC wifi, VoIP and CATV interfaces to support Triple-Play services. They comply with the latest ITU-T G.984/988 standards for GPON Access Technology Requirements.

- **Excellent Access Capacity**  
ONTUs support the GPON transmission rate of Downlink/Uplink 2.5/1.25Gbps. Connected with CXR OLT, they can realize 1:128 splitting ratio. The fiber link may reach up to 20km.
- **Secure Services**  
CXR OLT and ONT products embed a complete set of VLAN, STP, port isolation, ACL, QoS and Broadcast Storm Control functionalities to ensure secured and robust services to GPON users.
- **High Service Control Capability**  
CXR ONT support Rate-Limiting, advanced dynamic bandwidth distribution and accurate bandwidth limit, which provides users with the best quality of experience in best sharing the 2.5 Gbps resources.
- **Rich OMCI functions**  
CXR GPON solutions support the latest OMCI functions defined by the ITU-T G.988 standard, including configuration, alarm, performance monitoring, fault isolation and security management, but also CXR specific innovative management features.



## GP251 TO GP256 GPON ONT

### ETHERNET WI-FI VOIP CATV



Attributes	GP251	GP253	GP254	GP255	GP256
<b>Ethernet 10/100/1000</b>	1	4	4	4 POE+	4
<b>Wi-Fi</b>	na	802,11b/g/n/ac 2.4Ghz 300Mbps 5Ghz 400Mbps	802,11b/g/n 300 Mbps	na	802,11b/g/n 300 Mbps . 4SSID
<b>VoIP</b>	na	2xFXS	2xFXS	na	2xFXS
<b>CATV</b>	na	na	1x RF	na	na
<b>Router</b>	na	Bridge & router	Bridge & router	Bridge	Bridge & Router
<b>USB</b>	na	na	na	na	1 Host Mode
<b>Fiber</b>	SC/UPC	SC/UPC	<b>SC/APC</b>	SC/UPC	SC/UPC
<b>PON interface</b>	Downlink 2.5Gbps / Uplink 1.25Gbps - RX : 1490nm / TX : 1310nm - CATV TX : 1550nm Distance : 20Km Hi-Sensitivity optical receiver : -27dBm Security : ONU authentication mechanism				
<b>Standards</b>	ITU-T G.984/988 IEEE 802.1D, STP IEEE 802.1Q, VLAN IEEE 802.1w, RSTP				
<b>VLAN</b>	Port Based VLAN IEEE 802.1Q VLAN				
<b>Multicast</b>	IGMP-Snooping MLD-Snooping				
<b>QoS</b>	Backpressure flow control (half duplex) IEEE 802.3x flow control (full duplex) Head of Line (HOL) mechanism IEEE 802.1p, CoS Four priority queues on each port WR, SP and FiFo Rate limit				
<b>Reliability</b>	Loop detect Dying-gasp				
<b>Security</b>	Per port MAC address limitation Port protection Port storm control				
<b>Management</b>	CLI, Web, SNMP, Syslog and Telnet Software upgrade through TFTP and WEB				
<b>Power Supply</b>	12 Vdc external adapter	12 Vdc external adapter	12 Vdc external adapter	54Vdc external adapter	12 Vdc external adapter
<b>Pwr consumption</b>	<6W	<10W	<12W	<90w	<12W
<b>Dimensions WxDxH mm</b>	130x100x28	138x205x50	150x240x37	130x209x40	140x205x36 w/o antenna
<b>Operating temperature</b>	0 - 45°C	-5 - 55 °C	-5 - 55 °C	-5 - 45°C	0 - 45 °C
<b>Weight kg</b>	0,4	0,4	0,6	0,4	0,4

GP-2508 GP-2516  
OLT



**GP251**



**GP253**



**GP254**



**GP255**



**GP256**



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OLT



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## ORDERING INFORMATION

P/N	Description
<b>GP2508</b>	GPON OLT with 8x GPON, 4x Gigabit, 4x Combo Gigabit and 4x 10GE SFP+ uplinks, 2x redundant power supplies, provided with 1x AC power card but no GPON SFP
<b>GP2516</b>	GPON OLT with 16x GPON, 4x Gigabit, 4x Combo Gigabit and 4x 10GE SFP+ uplinks, 2x redundant power supplies, provided with 1x AC power card but no GPON SFP
<b>GP2500-AC</b>	AC Power supply card for GP2500 OLT, 110-230 V-AC input range, 150 W
<b>GP2500-DC</b>	48 V-DC power supply card for GP2500 OLT, 150 W
<b>SFP-GP-OLT-SM20H</b>	High budget Class C+ GPON SFP
	<b>ONT Modems</b>
<b>GP251</b>	GPON ONT bridge, one GPON transceiver SC/UPC, 1x 10/100/1000 GE port, 12 Vdc external mains adaptor
<b>GP253</b>	GPON ONT bridge - router, one GPON transceiver SC/UPC, 4x 10/100/1000 GE port, Wi-Fi 802.11ac, 2x VoIP POTS RJ11, 12 Vdc external mains adapter
<b>GP254</b>	GPON ONT bridge - router, one GPON transceiver SC/APC, 4x 10/100/1000 GE port, Wi-Fi 802.11b/g/n, 2x VoIP POTS RJ11, 1x CATV RF port, 12 Vdc external mains adapter
<b>GP255</b>	GPON ONT Bridge, one GPON transceiver 1310/1490nm SC/UPC, 4x 10/100/1000GE POE PSE 802.3at 30W, VLAN, QoS, rate limiting. 54 Vdc external mains adapter.
<b>GP256</b>	GPON ONT Bridge and Router, one GPON transceiver SC/UPC, 4x 10/100/1000BaseT GE LAN ports, Wifi 802.11b/g/n, 300 Mbps, 2T2R, 2x FXS/VoIP SIP. 1USB host, VLAN, QoS, rate control. 12 Vdc external mains adapter.