



NetCircle® GX3500 Chassis GPON / XG(S)PON OLT

Highlight

- ITU-T G.984/G.987/G.988 COMPLIANT 2.5Gbps DOWNSTREAM AND 1.25Gbps UPSTREAM GPON INTERFACE
- HYBRID PLATFORM FOR GPON/XG(S)PON TECHNOLOGY
- POWER/CSM REDUNDANCE, PON PROTECTION
- 80*GPON/40*XGPON/10*XGSPON PORT IN 5U CHASSIS
- HOT SWAP MODULAR DESIGN
- ADVANCED L2/L3 FUNCTIONS
- ABUNDANT QOS FUNCTIONS
- UNIFIED NMS PLATFORM
- REMOTE PROVISION AND MANAGEMENT



Overview

- GENEW's GX3500 is the chassis GPON platform which support GPON/XG(S)-PON and fully compliance with ITU-T G.984/G.987/G.988 standards. Coordinate with GENEW's ONT, it completes the end-to-end optical last mile with up to 10Gbps bandwidth for triple play services to residential and business customers.

Key Benefit

Cost-effective Triple Play Transport

GX3500 supports up to 80GPON/40XGPON/10XGSPON links in 5 service slots and serves maximum of 5120 subscribers from a compact 5U chassis. It provide 8 10GE SFP+ uplink interface in 2 uplink slots. GX3500 also provides 8 additional 10GE SFP+ uplink ports in CSM(Control & Switch Module). High subscriber density and low cost of entry, combined with the operational cost savings of GPON technology make GENEW GPON a compelling alternative to legacy, last-mile access solutions.

Enriched Bandwidth Allocate Policy

GX3500 supports 1024 ALLOC-IDs and 4096 GEM-Ports. It supports 5 T-CONT types compliance with ITU-T G.984.3 as well. The enriched QoS features such as traffic policy/traffic shaping/rate limit/Schedule allow operators to provision flexible bandwidth allocate policy for multiple customized service.

Flexible Provisioning, Quick to Revenue

GX3500 supports SNMP/CLI for remote management. Powerful OMCI functions enable remote diagnostics, flexible provisioning, and reconfiguration of the GENEW NMS platform.



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A global telecom infrastructure provider of innovative carrier-class Core, Broadband Access and Critical Communications.

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NetCircle® GX3500

Chassis GPON / XG(S)PON OLT

Features

PON

- Splitter Ratio: 1:128(GPON), 1:256(XG(S)PON)
- 4096 GEM Ports
- 1024 T-CONT
- Support B+/C+(GPON), N1/N2a(XG(S)PON) transceiver
- SN / SN+Password ONU authentication
- FEC
- ONU Digital Diagnostic Monitor
- Rogue ONU Detection

L2

- Line-speed switch/forwarding
- 128K MAC address table
- Port-based VLAN, Protocol-based VLAN, 802.1q VLAN
- ONU-based QinQ, 1:1/N:1 VLAN translate
- LACP/LAG
- STP/RSTP/MSTP
- Port Mirror
- Flow control / Back pressure
- Broadcast/DLF/Unknown Multicast storm control

L3

- Switch Virtual Interface (SVI): IPv4/IPv6
- Static Route
- Static/Dynamic ARP
- ICMP/Traceroute
- DHCP Server / DHCP Relay: IPv4/IPv6

Multicast

- IGMPv1/v2 snooping
- MLDv1 snooping
- IGMP snooping with Proxy
- Fast Leave
- 2K IGMP table

QoS (Quality of Service)

- IEEE 802.1p, 8 CoS queue
- SP/WRR/SP+WRR
- IPv4 TOS/IP Precedence
- Classification/Shaping/Policy/Rate limit/Schedule
- DBA
- ONU-based bandwidth control in downstream

Security

- SSH
- ACL
- User isolation
- Encryption in PON downstream
- DHCP Option82 / PPPoE+

OAM

- FTP/TFTP, Ethernet OAM
- SNMP v1 & v2c, Telnet (IPv4/IPv6), Console (CLI)
- In-band/Out-band Management
- Auto provision for ONU configuration
- PM

Specification

Physical

Size: 442mm (W) x 259mm (D) x 219mm (H)
 Weight: 15.4kg
 Power: DC: -48V (Pluggable)
 Dual DC power redundancy
 Instructure : 5U 19 inches. Hot Swappable, Modular
 Uplink: 4*4*10GE SFP+ interface
 PON: 5*16 GPON/5*8 XGPON/5*2 XGSPON
 PON fiber : SM, BIDI
 PON Interface type: SC/UPC

Parameters

Switch Capacity: 640Gbps
 Throughput: 480Mpps
 Flash Size: 64M Bytes (CSM), 64M Bytes (PON)
 Memory Size: 1G Bytes (CSM), 1G Bytes (PON)
 Consumption: 450W
 Split Ratio: 1:64 (GPON), 1:128 (XG(S)PON)
 Bandwidth: GPON: 1.25Gbps (Up), 2.5Gbps (Down)
 XG(S)PON: 2.5Gbps (Up), 10Gbps (Down)
 PON Tx Power: 3~7dBm (C+), 4~8dBm (N2a)
 PON Rx Sensitivity: -30 dBm (C+), -29.5dBm (N2a)
 PON Rx Overload: -12 dBm (C+), -9dBm (N2a)
 Wavelength: GPON: 1310 nm (Up), 1490 nm (Down)
 XG(S)PON: 1270nm (Up), 1577nm (Down)

Compliant

ITU-T G.984/G.988
 IEEE 802.1D, Spanning Tree
 IEEE 802.1Q, VLAN
 IEEE 802.1w, RSTP
 IEEE 802.3ad, LACP
 Ethernet – II

Environment

Operating Temperature : -5°C~45°C
 Storage Temperature : -40°C~70°C
 Relative Humidity : 0%~90%, no condensing

Part	Description	Num
RACK	Chassis, include Backplane and fan.	1
CSM1G	Control and Switch Module, 4*10GE SFP+, 1*RJ45 (RS232) console port, 1*RJ45 out-band MGMT port	2
GPN2A	GPON card, 8*GPON ports, 1*RJ45(RS232) console port	5
GPN2C	GPON card, 16*GPON ports, 1*RJ45(RS232) console port	5
XGN1A	XGPON card, 8*XGPON ports, 1*RJ45(RS232) console port	5
XGS1D	XGSPON card, 2*XGSPON ports, 1*RJ45(RS232) console port	5
OPN1C	PON Aggregation card, 4*10GE OTU ports, 1*RJ45(RS232) console port	5
XUC1B	Uplink card, 4*10GE SFP+ ports	2
POW1A	DC power card, input: -40V~-60V	2