

GATE-X EPON OLT

GX-4000C Series

GATE-X GX-4000C series is the chassis based solution for servicing high density FTTx subscribers for triple play applications. GX-4000C series, the optical line terminal is the head end of EPON access network, which along with GX-4000C (pizza type) offer complete FTTx solution. With high port density, advanced switching features in carrier grade ATCA Platform, and comprehensive EMS. GX-4000C offers an optimal solution for telecom carrier to provide triple play services to residential and enterprise customers in a most efficient and economical way. The system has redundancy for critical components and thus offers high availability for enterprise customers. GX-4000C series support up to 40 EPON links; with each link capable of offering up to 1Gbps symmetrical bandwidth to 64 subscribers*.

*Assuming a split ratio of 64.

Features and Benefits

L2/L3 Switching

- Advanced L2/L3 Switching
- IPv6 routing and tunneling
- Hardware based IP multicast routing/forwarding.
- IEEE 802.3x flow control
- IEEE 802.1q VLAN, Q-in-Q stacking VLAN and PVLAN
- IGMP snooping v1/2c and IGMP Proxy
- Broadcast storm control
- Unicast and multicast limiting
- 802.1p, TOS, DSCP, VLAN-based, L4 port Qos classification
- SP, WRR Qos scheduling
- Egress rate shaping

EPON

- IEEE 802.3ah compliance
- Hardware based configurable Dynamic Bandwidth Allocation (DBA) IEEE802.3ah QAM
- 256 LLIDs for each PON link
- Per LLID based Service level agreement (SLA)
- IP multicast shaping
- Local and remote diagnostics
- L2/L3/L4 filtering and classification
- AES128 encryption

System

- PICMG 3.0 ATCA standard
- 1+1 redundancy for switching and controller cards
- Optical redundancy for switching and controller cards
- Intelligent platform management interface

System Management

- Comprehensive EMS
- SNMP protocol, v2c
- IEEE 802.3ah OAM
- Support for inband management through 10G ethernet port
- Serial console
- Error logs in EPROM based memory
- Upload and download configuration settings
- Remote firmware upgrade

Security

- Hardware based network security without impacting network performance
- High performance IPsec engine that supports DES, 3DES, HMAC-SHA-1
- DoS attack prevention engine
- Per port blocking
- Supports IEEE 802.1x
- MAC address blocking

Key Features

- IEEE802.3ah standard compliance
- 40 EPON ports to service 5000+ subscribers*
- Dynamic Bandwidth Allocation (DBA) and quality of service
- Advanced L2/L3 switching and routing features
- Designed on PICMG 3.0 ATCA Platform
- Comprehensive EMS that offers complete FCAPS functionality to efficiently fit into existing telecommunication management network
- Remote management of OLT (provisioning, diagnostics, firmware upgradation)
- Support Inband management

Technical Specifications

Interfaces

40 EPON ports each supporting 1Gbps symmetrical
Ten 10GbF uplink ports
A 10/100M Ethernet control port for ut of band management (EMS)
Serial console for CPU, protocol processors
Rear access for EPON ports

Optics

Optical fiber type: Single mode
Wavelength: 1490nm for transmit and 1310nm for receive
Output power: +2 dBm to +7 dBm
Split ratio of 1:64 (max)

Power

Dual -48V Power feed or 230V Ac Power feed
Power consumption of 1100W including fan Power

Operating temperature

0 to 70 deg C

Weight

30 Kg

Dimension

17" wide, 15.75" deep, 22.75" height

Installation

19" rack mountable

Cooling

3 removeable fan trays
6 fans of 330cfm each
240W of cooling per board

Cards

10 OLT line cards
2 switching and control cards
2 shelf manager cards
All cards are Hot swappable

Redundancy

1 + 1 for switching and controller card
Optional redundancy for OLT line cards

Backplane

14 slot Dual star ATCA backplane

Ordering Information

Model	Network Interface				Casing Type
	PON port	Uplink 10G XFP	Uplink 1G SFP	Uplink 1G RJ45	
GX- 4004C	4	0	0	4	Chassis
GX-4100C	4	1	0	0	Chassis
GX-4110C	4	1	1	0	Chassis

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