



**Leading 5G Innovations**

## ***ZXA10 C610 PRODUCT DATASHEET***

**1U High PON OLT Meets Flexible  
and Cost-effective Ultra-BB Deployment**

# ZXA10 C610 Product Datasheet

ZXA10 C610 is a 1U high PON OLT that meets flexible, fast and cost-effective access of FTTx, suiting the scenarios such as low-density/remote/cost-sensitive area coverage, smart industrial park, commercial building access and FTTM, etc.



## Key Features

- The industry's highest density 1U OLT, provides up to 16 GPON ports and supports up to 1024 FTTH subscribers (1:64).
- Adapts to low-density areas coverage, remote areas coverage, cost-sensitive coverage, smart park and business buildings access, FTTM, and shares the same site/rack with wireless base stations, outdoor cabinet installation.
- Supports series of installation modes, including residential building, equipment room, basement, outdoor cabinet, and pole-mount to reduce the expenditure in equipment room construction and lease payment as well as the maintenance cost.
- Carrier-class security protection and high-reliability redundancy design.



## Hardware Features

- **Shelf configuration**
  - Total 4 slots
  - 1 slot for switch control and GPON ports
  - 2 slots for power card
  - 1 slot for fan
- **System capability**
  - System throughput: 160 Gbps
- **Subscriber interface**
  - GPON: 16/8 ports per shelf
- **Uplink interface**
  - 4\* 10GE/GE optical and 2\* GE electric uplink interfaces per shelf

- **Clock synchronization interfaces**

- 1 \* 120Ω 2Mbits/2Mhz clock and 1PPS+ToD input/output interface
- 1 \* out-of-band management interface
- 4 \* digital sensors (ALM)
- 1 \* RS232 serial interface for local management and environment monitoring



## PON Features

- **GPON**

- GPON is compliant to ITU G.984.x
- Support up to 1:128 optical split ratio
- Support OLS
- Type B optical link protection
- Support FEC
- Support AES-128 encryption



## L2 Features

- Access control: MAC filtering, ACL
- L2-port: physical Ethernet port, logical Vport and aggregation port, support L2 service and TPID configuration
- VLAN : 1:1 VLAN, N:1 VLAN, flexible QinQ, VLAN bridge, TLS VLAN, M-VLAN, VLAN reuse
- 32k MAC address, MAC address management, static MAC, MAC address aging/learning/query/number limit
- Uplink protection: STP/RSTP/MSTP, LACP and trunking



## QoS Features

- Queue & scheduling mechanism: SP, WRR, SP+WRR based on Ethernet ports or PON ports
- DSCP labeling and relabeling
- Traffic statistics
- H-QoS
- Stream classification, rate limiting, shaping and priority setting
- Congestion avoidance: tail drop, color-based RED, WRED
- Configuration of CIR/PIR/CBS/PBS, TrTCM(Two Rate Three Color Marker)



## Security Features

### • Network security

- Broadcast/multicast flooding rate limitation
- Downstream ARP filtering
- Forwarding panel protocol packet rate limit
- DHCP anti-spoofing
- Anti-DoS attacking
- ARP/IP anti-spoofing
- IP Source Guard
- ACL

### • Service security

- DHCP service security
- MAC address anti-flapping
- Port separation: Uplink port/User port
- Broadcast packets isolation based on VLAN

### • System security

- L4 port disable
- CPU protocol packet rate limit and scheduling



## OAM Features

- Operator security, Multi-privileged operator, FTP/TFTP, ACL
- Management protocol and interface: CLI, Telnet, SNMP v1/v2/v3
- Remote firmware download and upgrade
- Environment detecting, control and alarm
- Performance statistics
- Over-heat protection



## Multicast

- IGMP Snooping and proxy (v1/v2/v3)
- MLD v1/v2
- Multicast VLAN
- MVLAN: 4k Multicast VLANs
- Channel Access Control (CAC), Preview (PRV) and Call Detail Record (CDR) for IPTV
- Global or VLAN protocol enable or disable
- Multicast snooping/proxy, router modes
- ASM/SSM mode based on IGMPv3 and MLDv2
- Less than 20 ms channel zapping delay
- SCB multicast forwarding and L3 multicast forwarding



## Working Environment

- Operating temperature: -40 °C ~ 65 °C
- Operating humidity: 5% ~ 95%, non-condensing
- Altitude: ≤ 4000 m
- Air pressure: 70 kPa ~ 106 kPa



## Power Supply

- Working voltage: DC, -48 V ( $\pm 20\%$ ) / -60 V ( $\pm 20\%$ )



## Dimensions

- 43.6 mm (H) \* 442 mm (W) \* 220mm (D)
- 43.6 mm (H) \* 482.6 mm (W) \* 220mm (D) (including mounting ears of IEC standard )



## Weight

- Gross weight: 7.5 kg(16 GPON), 6.5 kg(8 GPON)
- Net weight: 4.9 kg(16 GPON), 4 kg(8 GPON)