

# ZXA10 C320 Datasheet

With the requirements of communication services increasing, the value-added services (VAS) including 3D network games, video conference/phone, Video on Demand (VoD) and IPTV are key means for operators to provide differential services to attract more subscribers, and gain income growth.

ZTE ZXA10 C320, a small size, full-service and future-proof optical access convergent platform, provides carrier class QoS and reliable network to meet the requirements for small-scale implementation of FTTx services.



## Key Features

- Unified platform for GPON, EPON and P2P
- Small size and compact design, flexible network and fast deployment
- 2U frame with 2 service slots, compatible with ZXA10 C300 line cards
- Abundant service support capability: IPTV, VoIP, HSI, VPN, mobile backhaul, etc
- Diverse interfaces: P2MP/P2P /TDM interfaces for business and residential application
- Higher security assurance: ONT authentication, user ID identification, port isolation, address binding, packet filtering, and broadcast packet suppression.
- High reliability: key parts redundancy; support Type B and Type C protection for PON downlink and LACP/ STP/RSTP/MSTP/ZESR for uplink
- Service differentiation: Comprehensive QoS mechanisms for voice, video and high speed Internet services.
- Support DC input redundancy
- Support 1:1 protection for PON interfaces
- Support 1:1 protection for SW (core card) card
- Support Synchronous Ethernet and 1588v2

## Technical Specifications

### ■ System Architecture

- Capacity
  - Backplane capacity : 420G bps
  - Matrix capacity: 84Gbps
  - Bandwidth per subscriber slot: 80Gbps
  - GPON up to 16 ports
  - EPON up to 16 ports
  - P2P up to 32/96 ports
  - Uplink interfaces up to 4 \*GE (Optical )+2\*GE(Electronic) or 2\*10GE(Optical )+2\*GE(Optical ) +2\*GE(Electronic)
  - E1/T1 up to 32 ports
- Chassis Configuration (19")
  - 5 slots
  - 2 slots for universal line cards
  - 2 slots for switch& control cards
  - 1 slot for fan module
- Subscriber Card Density
  - GPON card: 8 ports per card
  - EPON card: 8 ports per card
  - P2P card: 16/48 ports per card
  - GE card: 8 ports per card
  - 10G EPON card: 4 ports per card

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- Uplink interface card
  - 1\*10GE optical port ( Configurable 1\*GE optical port)
  - 1\*GE optical port
  - 1\*10 M/100 M/1000 M electrical Ethernet port
  - 1\*STM-4/OC12 or 2\*STM-1/OC3 TDM uplink per card
  - 32\* E1/T1 uplink card ( balanced and unbalanced)
- Common interfaces
  - 1\*environment monitoring interface
  - 1\*management interface
  - 1\*maintenance serial interface

## ■ PON Features

- EPON compliant with IEEE 802.3ah
- GPON compliant with ITU G.984.x
- Support 1:64 optical split ratio for GPON/EPON
- Support OLS (Optical Laser Supervising )
- Max logical reach: 60km
- Max physical reach: 20km
- Max link difference: 20km
- High-efficient DBA: NSR-DBA, SR-DBA
- Support IEEE 1588V2, Synchronous Ethernet
- Transceiver power budget: Class B+ or class C+
- Type B and type C optical uplink protection
- Support FEC
- Support AES128
- Support SCB
- Support 1550nm for third party CATV broadcasting

## ■ L2/L3 Features

- 32K MAC address table
- 4K VLAN
- 1:1/N:1 VLAN
- 802.1ad, SVLAN, Selective QinQ, VLAN stacking
- Line-rate forwarding
- STP/RSTP/MSTP compliant to IEEE 802.1d/802.1w/802.1s
- UAPS/EAPS/ZESR/hand in hand protection
- BFD function for L3 routing protection
- Link aggregation IEEE 802.3ad
- IPv4/IPv6 dual stack
- L3 routing:
  - 12K IPv4 routing forwarding entries, and 6K IPv6 routing forwarding entries
  - Statistic routing
  - RIP V1/V2, OSPF v2, IS-IS, BGP
  - Multicast routing: PIM-SM, PIM-DM
- Multicast – IPTV
  - 1K Multicast groups IGMP V1/2/3
  - IGMP Snooping and proxy (v1/v2/v3)
  - MVLAN: 256
  - Channel Access Control (CAC), Preview (PRV) and Call Detail Record (CDR) for IPTV
  - Less than 50ms channel zapping delay
- QoS
  - 8 queues per port
  - Queue & scheduling mechanism: SP, DWRR, SP+DWRR
  - IPv4 DSCP Diffserv
  - Stream classification, rate limiting, shaping and priority setting

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- Traffic statistics
- WRED and triple color
- SLA: CIR, PIR, EIR, MBS

## ■ Security

- L2- L4 ACL
- IP and MAC source guard
- Resistance against DOS attacks
- MAC/IP anti-spoofing (MAC binding, IP binding, DHCP snooping)
- Anti-flooding: broadcast packet suppression, IGMP packet suppression, DHCP packet suppression
- MAC address number limit based on VLAN or GEM-port
- Port mirroring
- User port identification such as PPPOE+ and DHCP Option 82

## ■ O&M

- Operator security, Multi-privileged operator, SSH v1/v2, FTP/TFTP, ACL
- Management protocol and interface: CLI, Telnet ,SNMP V1/V2C/V3, MIBII
- Remote firmware download and upgrade
- Environment monitoring, control and alarm

## ■ Environment

- Operating temperature: -5 ° C ~45 ° C ( long term), -25° C ~55° C (short term)
- Operating humidity: 5% ~ 95%, non-condensing
- Air pressure: 70 kPa - 106 kPa

## ■ Power Supply

- Working voltage: -48 V (±20%) , later will support 220V AC (±20%, 50Hz)

## ■ Dimensions

- 86.1mm (H) \* 482.6mm (W) \* 270mm (D) (19 inch shelf)
- 2200 mm (H) x 600 mm (W) x 300 mm ((D) (Rack)

## ■ Weight

- C320 shelf (Full) : 6.5kg
- 19 inch rack(Full) :130kg

## ■ Power Consumption

- GPON < 200W
- EPON < 130W