

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 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, XG-PON1 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
- 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/ UAPS/STP/ERPS(G.8032) for uplink
- Service differentiation: Comprehensive QoS mechanisms for voice, video and high speed Internet services.
- Support DC input redundancy
- Support AC power supply
- Support 1:1 protection for PON interfaces
- Support 1:1 protection for SW (core card) card
- Support 1588V2 and Synchronous Ethernet

Technical Specifications

■ System Architecture

- Capacity
 - GPON up to 32 ports
 - XG-PON1 up to 16 ports
 - P2P up to 96 ports
 - Uplink interfaces up to 4 *GE (Optical)+2*GE(Electronic) or 2*10GE(Optical)+2*GE(Optical)+2*GE(Electronic)
- Chassis Configuration (19")
 - Total 5 slots
 - 2 slots for universal line cards
 - 2 slots for switch& control cards
 - 1 slot for fan module
- Subscriber Card Density
 - GPON card: 8/16 ports per card
 - XG-PON1 card:8 ports per card
 - P2Pcard: 24/48 ports per card

ZXA10 C320 Datasheet

- 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
- Common interfaces
 - 1*environment detecting interface
 - 1*management interface
 - 1*maintenance serial interface

■ PON Features

- GPON compliant with ITU G.984.x
- P2P compliant with ITU G.985/G.986
- XG-PON1 compliant with ITU G.987.x and ITU G.988
- Support 1:128 optical split ratio for GPON/XG-PON1
- Support OLS (Optical Laser Supervising)
- Max logical reach: 60km
- Max physical reach: 20km
- Max link difference: 20km
- High-efficient DBA: NSR-DBA,SR-DBA
- Synchronous Ethernet
- Transceiver power budget: Class B+ or class C+ for GPON. N1 and N2 for XG-PON1
- Type B and type C optical uplink protection
- Support FEC
- Support AES128
- Support SCB
- Support 1550nm for third party CATV broadcasting

■ L2/L3 Features

- 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/ERPS/LACP protection
- Link aggregation IEEE 802.3ad
- L3 routing:
 - 12K IPv4 routing forwarding entries
 - IPv4 and IPv6 statistic routing
- Multicast – IPTV
 - 1K Multicast groups
 - IGMP Snooping and proxy (v1/v2/3)
 - MLD V1/ V2, snooping/proxy
 - 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, WRR, SP+WRR
 - IPv4 DSCP Diffserv
 - Stream classification, rate limiting, shaping and priority setting

ZXA10 C320 Datasheet



- Traffic statistics
- SLA: CIR, PIR, EIR

■ 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, FTP/TFTP, ACL
- Management protocol and interface: CLI, Telnet, SNMP V1/V2C/V3, MIBII
- Remote firmware download and upgrade
- Environment detecting, control and alarm

■ Environment

- Operating temperature: -40°C ~ 65°C
- Operating humidity: 5% ~ 95%
- Air pressure: 70 kPa - 106 kPa

■ Power Supply

- DC: $-48\text{V}\pm 20\%$, $-60\text{V}\pm 20\%$;
- AC: 100V~240V

■ Dimensions

- 86.1mm (H) * 482.6mm (W) * 270mm (D)
(19 inch shelf)
- 2200 mm (H) x 600 mm (W) x 300 mm (D)
(Rack)
- 1035 mm(H) x 770 mm(W) x 460 mm(D)
(Outdoor Cabinet)

■ Power Consumption

- GPON: <180W (with GTGH full configuration), <140W (with GTGO full configuration)
- XG-PON1: <290W (with GTXO full configuration)
- P2P: <250 W (with FTGK full configuration)