

ZTE C600 Optical Line Terminal (OLT) Product Overview and Technical Specifications

Overview:

The ZTE C600 is a next-generation high-density Optical Line Terminal (OLT) designed for future-proof broadband access networks. It serves as a core aggregation node in Fiber-to-the-Home (FTTH), Fiber-to-the-Business (FTTB), and mobile backhaul scenarios. By supporting both GPON, XGS-PON, and Combo PON technologies on a unified platform, the C600 enables service providers to smoothly evolve from Gigabit to 10-Gigabit symmetric broadband without replacing existing chassis or fiber infrastructure.



Leveraging a distributed architecture and advanced cooling design, the ZTE C600 delivers exceptional reliability with key features like Type B/C protection switching and in-service software upgrades. Its high slot density and low power consumption per port make it ideal for central offices and outdoor cabinets alike, supporting massive IoT connectivity and premium services such as 4K/8K video,

cloud VR, and enterprise leased lines.

Key Features:

- Unified PON Evolution: Native support for GPON, XG(S)-PON, and Combo PON on any service port, allowing seamless migration from 1G to 10G symmetric speeds while reusing existing ODN networks.
- High-Density & Scalability: Up to 16 service slots per subrack with 4 or 8 PON ports per line card, enabling over 128 XGS-PON ports per chassis and serving more than 8,000 subscribers in a single rack.
- Carrier-Grade Reliability: Full redundancy for power, fans, and control modules, plus hardware-based Type B/C protection switching (<50 ms) and non-stop routing (NSR) for zero packet loss during upgrades.

Technical Specifications:

The following table summarizes the key hardware and performance parameters of the ZTE C600 OLT.

Parameter	Specification
Form Factor	4U / 6U / 9U subrack options, 16 service slots, 2 main control slots
Capacity / Speed	Backplane switching capacity: 3.6 Tbit/s; Max PON ports: 128 (XGS-PON); Max line rate per port: 10

	Gbit/s symmetric
Operating Temperature	-40°C to +65°C (extended range with outdoor enclosure)
Power Supply	-48V DC redundant, typical power consumption < 15W per PON port
Protection Switching	Type B (1+1) and Type C (N:1) fiber protection, <50 ms switchover

