ZXMP S385 Hardware Installation Manual - Official Technical Overview & Hardware Datasheet

SYSTEM OVERVIEW

The ZTE ZXMP S385 is a carrier-grade, intelligent STM-16/STM-64 Multi-Service Transport Platform (MSTP) designed for the backbone and high-capacity aggregation layers of modern telecommunications networks . As a highly integrated SDH (Synchronous Digital Hierarchy) multi-service node, the ZXMP S385 converges the functionalities of an ADM, DXC, Ethernet switch, and ATM switch into a single, compact chassis . This platform provides a future-proof foundation for network operators seeking to efficiently transport a diverse mix of legacy TDM, data, and next-generation packet services while ensuring high availability and scalability.

ARCHITECTURE & CHASSIS DESIGN

The ZXMP S385 hardware architecture is centered on a high-capacity, non-blocking switching fabric that delivers a maximum 180 Gbps high-order (VC-4) and 40 Gbps low-order (VC-12/VC-3) cross-connect capability . This robust switching core enables the device to function as a medium-capacity DXC or a high-capacity ADM, facilitating complex network topologies including ring, mesh, and hub configurations .

The system is housed in a rugged, 19-inch rack-mountable chassis with dimensions of 889.0mm (H) x 482.6mm (W) x 270.0mm (D) and a fully populated weight of approximately 23.0 kg . The chassis design maximizes front-access operations, providing up to 14 versatile service slots that support single-board mixing, which simplifies network planning and maintenance .

HARDWARE FEATURES & COMPONENT BREAKDOWN

1. **Switching and Control Plane:** The system utilizes a 1+1 redundant Cross-Connect and Clock (XCS) board architecture, incorporating dual buses for service, overhead, and clock distribution to guarantee system stability . The Network Control Processor (NCP) boards (installed in slots 18 and 19) also operate in a 1+1 protection mode, providing automatic switchover for

uninterrupted management connectivity .

2. **Interface & Service Ports:** The ZXMP S385 boasts a comprehensive range of physical interfaces to support any service delivery requirement. This includes high-speed optical interfaces (STM-64/STM-16/STM-4/STM-1), electrical interfaces (E1/T1, E3/T3, STM-1), and a full suite of data interfaces such as Fast Ethernet (FE), Gigabit Ethernet (GE), POS, and ATM .

3. **Power and Cooling:** The system supports fully redundant, hot-swappable power supply units (AC or DC) with 1+1 protection to ensure operational continuity. A high-efficiency, front-to-back cooling system is integrated into the chassis to manage thermal dissipation, ensuring reliable performance under full-load conditions .

COMPLIANCE & STANDARDS

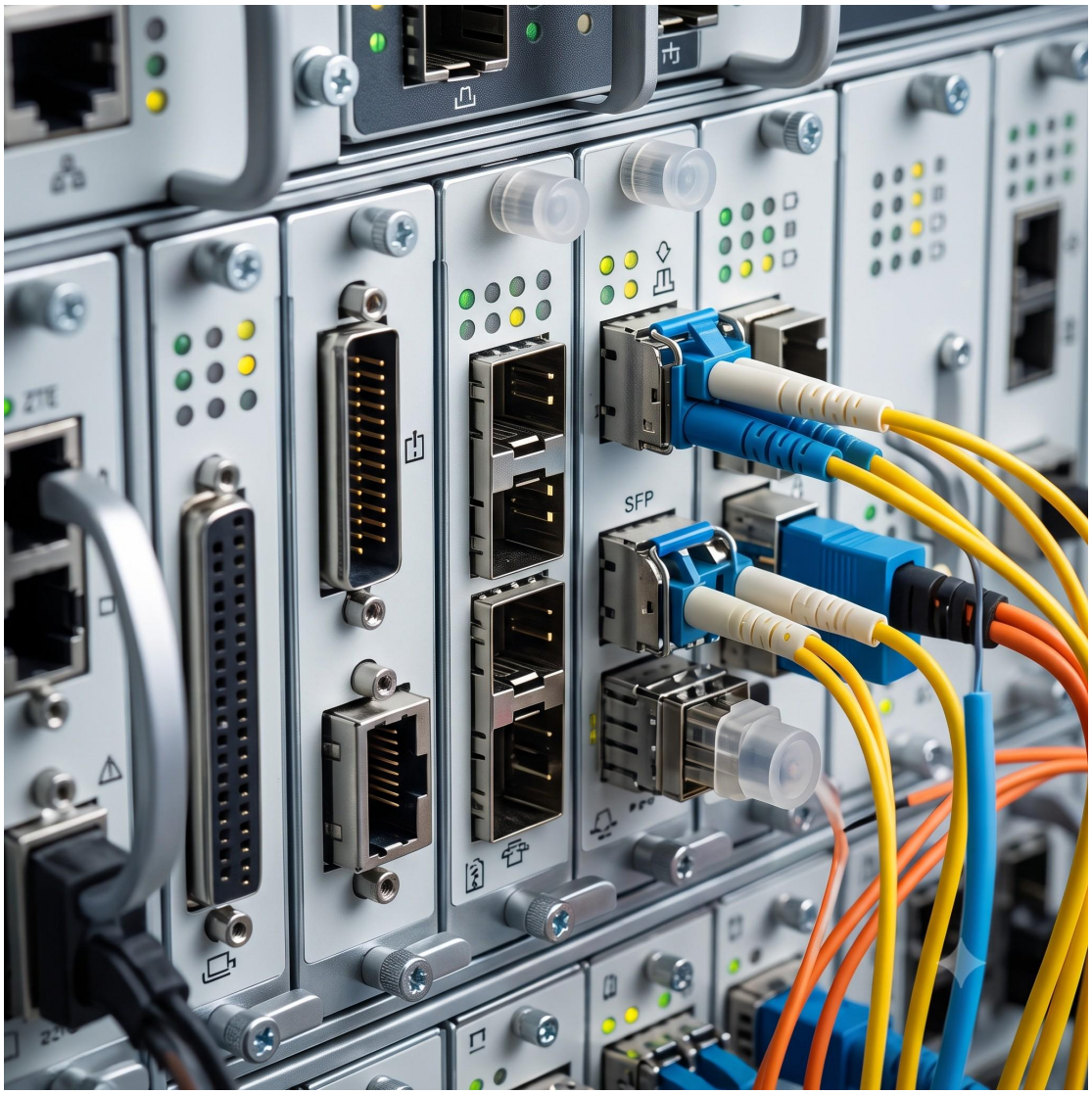
The ZXMP S385 is engineered to meet the rigorous demands of global telecom operators, fully complying with ITU-T standards for optical networking. Its design philosophy emphasizes:

- **Device-level Protection:** Redundancy for critical components (XCS, NCP, power) and advanced 1:N TPS (Tributary Protection Switching) for E1/T1, E3/T3,

and FE interfaces .

- **Network-level Protection:** Comprehensive support for ITU-T standard protection schemes including 1+1/1:N MSP, 2-fiber and 4-fiber BLSR, SNCP, and DNI .

- **Carrier-Grade Reliability:** Advanced features like Logic Sub-network Protection (LSNP) and a high Mean Time Between Failures (MTBF) ensure network stability and service continuity .



TECHNICAL SPECIFICATIONS

The following table summarizes the key technical parameters and specifications for the ZTE ZXMP S385 platform.

Parameter	Specification
Form Factor	19-inch Rack-mountable Chassis (889 x 482.6 x 270 mm)
Switching Capacity	180 Gbps (High-Order) / 40 Gbps (Low-Order)
Service Slots	Up to 14 Universal Slots
Power Supply	1+1 Redundant, Hot-swappable AC/DC
Optical Interface Support	STM-1/4/16/64 (SFP based, LC connector)
System Protection	1+1 Redundant XCS, NCP, and Power Modules
Network Protection	1+1/1:N MSP, 2/4-fiber BLSR, SNCP, DNI
Typical Weight (Fully Populated)	23.0 kg

ORDERING OPTIONS & LIFECYCLE

The ZXMP S385 is available with a variety of configuration options. Please note that this is a mature, field-proven platform. Customers are advised to consult the latest ZTE product lifecycle announcements for End of Marketing (EOM) and Last Time Buy of Spare Parts (LTBSP) dates to ensure continued support and availability of specific line cards, such as the CSE, OW, OL16FC, and OL4ZD4A models . For the most current ordering information and to verify parts availability, please contact your local ZTE representative.