Overview

ZXMP S325 is the new-generation compact full-service access equipment. It support TDM, IP services and smooth upgrade from STM-1/4 to STM-16, so it is applied to basestation service access, VIP service access and fixed-line IP service access. It works with ZTE’s other MSTP equipment in one network to provide the carriers with the solution of the highest performance-cost ratio.

ZXMP S325 adopts the advanced idea of “font-facing installation, front-facing maintenance”, which is applicable to situations such as back-to-back, against-wall, against-corner, thus enables convenient and reasonable utilization of the equipment room.

Major characteristics

Small size, compactness and flexible application

The ZXMP S325 features small size and compact structure. It can be placed inside a standard 19-inch rack. The system sub-rack comprises an interface area, a functional board area, and a fan plug-in box. The functional board area has 10 service board slots, and all service boards can implement mixed insertion. Different configurations of the sub-rack boards can implement various types of NEs to deliver all functions of SDH/MSTP equipment. The brand-new dustproof design eliminates the need for a separate dustproof plug-in box. Three fan units are placed side by side and are independent to each other. NCP controls the revolution or shutdown of the fans and provides stall alarm.

Powerful service access capability


- Provide EOS functions and support EPL, EVPL, EPLAN and EVPLAN data service models to meet user demands for high-bandwidth data services.

- Provide good QoS control. It is possible to configure service flow according to IP priority, DSCP priority, TOS priority, COS priority and port priority.

Robust cross-connect capability and scalability

- ZXMP S325 can perform multidirectional service full-cross, with high-order cross capacity of 128×128VC-4, low-order cross capacity of 2016×2016 TU-12, and single sub-rack access capacity of 92×92VC4.

- ZXMP S325 can work as extension sub-rack of ZXMP S385, ZXONE S800, etc.

Complete and perfect protection capability

Equipment-level protection:

- ZXMP S325 has 1+1 protection for key boards like clock board and cross board, and 1:N protection for E1/T1/E3/T3/FE/ STM-1 (E) service interfaces. One sub-rack can support 2 groups of different electrical tributary protections.
● ZXMP S325 has two power supply systems. Functional boards use the distributed power supply. If a board is plugged or unplugged in system operation, there will be no influence on other boards and the system.

network protection:

● ZXMP S325 has networking features in ITU-T recommendations. It can perform such protections as 1+1 MS protection, 2-fiber bidirectional MS protection ring, 4-fiber bidirectional MS protection ring, Dual-Node Interconnection (DNI) protection and Subnet Connection Protection (SNCP).

● It can also support the protections of data service layer like shared Ethernet protection ring.

Reliable timing and synchronization processing capability

● ZXMP S325 has the advanced phase locking circuit for the selection of synchronous with external clock, line clock or E1/T1 tributary clock.

● It supports synchronization priority switching and automatic SSM-based switching to optimize timing synchronization allocation, lower the difficulty in synchronization planning, avoid timing loop and keep network synchronization in the best state.

● It has E1 tributary retiming function.

Easy Maintenance and Management

● Optical module is pluggable (SFP module with LC connector). Different optical modules can be selected as required in the optical board configuration. Different optical boards may share spare boards and parts to reduce the cost.

● Optical interface supports the online optical power inspection so as to locate line problem quickly and improve maintenance efficiency. The system may support the optical power inspection of GE interface by upgrading the software.

● Front interface and boards can be inserted into any slot, which makes flexible equipment configuration and network planning & optimization.

● The equipment has high integration to occupy small space, and has low power consumption to reduce power supply cost.

ZXMP S325 can be managed by using ZTE’s Unified Management Platform, NetNumen™ U31, which offers Graphical User Interface and provides complete functions:

● Fault management
● Topology management
● Performance management
● Configuration management
● Security management
● Log management
● Maintenance management and various statistics reports

Long-distance transmission

Usually, the long-distance transmission is utilized by using WDM. But in some scenarios, the distance between two network elements is beyond 80 km and there is no WDM device available in the same site. ZXMP S325 solves this problem by integrating optical amplification (OA) function on the same shelf and the embed OA board can be used as optical booster amplifier and/or optical preamplifier with different power gains, enhancing the transmission distance to far more than 80 km.

An optical line board of the ZXMP S325 provides DWDM optical interfaces or CWDM optical interfaces, and an OAD board implements the optical add/drop function of DWDM or CWDM signals. The two boards work jointly to implement the OAD interface function of the system.
## Technical Specification

<table>
<thead>
<tr>
<th>Technical Specification</th>
<th>ZXMP S325</th>
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</thead>
<tbody>
<tr>
<td><strong>Size (H×W×D)</strong></td>
<td>221.5mm × 482.6mm × 270 mm</td>
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<tr>
<td><strong>Weight</strong></td>
<td>&lt;9 kg</td>
</tr>
<tr>
<td><strong>Number of service slots</strong></td>
<td>10</td>
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<tr>
<td><strong>Switching capacity</strong></td>
<td>High-order cross of 128×128VC4 and low-order cross of 2016×2016VC12</td>
</tr>
<tr>
<td><strong>Service Interface</strong></td>
<td>STM-16, STM-4, STM-1 (O), STM-1 (E), E3, T3, E1, T1, FE, GE</td>
</tr>
<tr>
<td><strong>Maintenance and operation</strong></td>
<td>Front cabling, front installation and front maintenance</td>
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### Major service features
- **EOS**
  - Support EPL/EVPL/EPLAN services
  - Support the VC-12-Xv/VC-3-Xv/VC-4-Xv, LCAS, and GFP
  - Support L2 switch based on VLAN
  - Support RSTP/MSTP
  - Support LACP, LST
- **OAM**
  - Support order wire phone interface and TKR interface
  - Support F1 co-directional data interface with the rate of 64 Bit/s
  - Support Qx and LCT interface
  - Cross-scheduling of the overhead
  - Supports the TCM of high-order paths (HP-TCM)
- **Embedded WDM and OA**
  - Support the built-in wavelength division function, enable the add/drop multiplexing of the wavelength-order optical signals
  - Support the colored optical interfaces
  - Support embedded OA module
- **Synchronization**
  - Provides four external 2.048Mbit/s or 2.048MHz clock interface
  - Supports synchronization priority switching and SSM -based automatic switching
  - Supports the "S1 byte algorithm patent technology" developed by ZTE

### Power supply (DC/AC)
- Nominal voltage value: -48VDC/+24V
- Scope: -57VDC ~ -40VDC/+16VDC ~ +32VDC

### Power Consumption
- <250 Watts

### MTBF/MTTR
- >229424.4h / <2h

### Noise
- <55 dB

### Operating Environment Requirement
- Working temperature: -5℃ ~ 45℃
- Working humidity: 5%~95%
- Altitude: <4000 m
- **Aseismatic Degree**: 9 level
- **Electromagnetic compatibility**: The electromagnetic interference meets the CISPR22 A standard. The anti-interference performance meets the IEC1000-4 series standard.
- **Certificate of Certification**: CE, CB, RoHS