ZXMP S385 SDH-Based Multi-Service Node equipment

Upswing of services poses a gigantic challenge for network bandwidth. On request by transport network evolution, multi-service transport equipments featuring large capacity, flexible dispatch, high reliability, elastic bandwidth and upgradeability are needed to handle service delivery in the core network.

Considering service diversity and variation of network architecture, inheriting ZTE’s technology patents and experience in the field of SDH and implanting new technological contents in SDH equipments, ZTE launches ZXMP S385, an intelligent STM-16/STM-64 multi-service transport platform designed advanced technology, allowing customers to build the efficient and competitive network.

**Highlights**

Targeting network backbone layer or large-capacity convergence layer applications, ZXMP S385 can be served as medium-capacity DXC, large-capacity ADM, while enabling Ethernet switch and ATM switch functionalities via MSTP functions. It can be flexibly configured as REG/TM/ADM/MADM when serving as ADM. It has the ability to smoothly upgrade from STM-16 to STM-64.

- **Large-capacity and flexible service dispatch capability**

The equipment has the ability to process multiple lines of ECCs, fully satisfying the requirements for complex networking, supporting complex network topologies, such as linear, ring, hinge, ring with chain, tangent ring and crossing ring, at levels of STM-1/STM-4/STM-16/STM-64.

- **Strong multi-service access ability**

ZXMP S385 offers versatile service interfaces: STM-64/STM-16/STM-4/STM-1 optical interfaces; STM-1, E3/T3, E1/T1 (support framing processing) electrical interfaces; POS interface, ATM interface, FE/GE Ethernet interfaces and SAN interface. Multiple bearer modes like EOS, embedded RPR and embedded MPLS are available to deliver Ethernet private line (EPL), Ethernet virtual private line (EVPL), Ethernet private LAN (EPLAN) and Ethernet virtual private LAN (EVPLAN) services, addressing requirements for multiple technologies in different networking environments.

- **Highly reliable and complete equipment protection**

ZXMP S385 provides perfect equipment-level protection: with redundant design in hardware, dual-bus architecture is adopted in service bus, overhead bus and clock bus, resulting in a vastly improved system.
reliability and stability. Two cross-connect clock boards are employed to perform 1+1 protection for cross-connect clock.

1:N hardware service protection for PDH service board: 1:N (N<=9) protection for E1/T1 service board, 1:N (N<=4) protection for E3/T3, STM-1 and FE electrical interfaces.

Multiple protection modes include cabinet external power supply protection, board power supply protection and sub-rack power access protection.

- **Perfect and intelligent network protection**

ZXMP S385 supports perfect network-level protection: enabling ITU-T-recommended networking characteristics, protection modes containing: 1+1 link multiplex section protection, link 1:N protection (N=14), unidirectional path protection ring, 2-fiber bidirectional multiplex section protection ring, 4-fiber bidirectional multiplex section protection ring, dual node interconnection protection (DNI), subnetwork connection protection (SNCP), and logic subnetwork protection (LSNP).

ZXMP S385 features robust intelligence, supports automatic discovery of network topology and resource, automatic and rapid end-to-end service provision and resistance to multi-node failure in the network; its also supports multi-priority service protection and restoration policy.

- **Outstanding scalability**

ZXMP S385 can be smoothly upgrade to 10G system from 2.5G system. It can perform dispatch and add/drop of vast lower-order services during dispatching high-speed services. Designed with cutting-edge GFP, LCAS technologies, the system supports data/voice-oriented hybrid transmission, ensuring steady extending capabilities to dispatch and process data services.

- **Sound design, easing operation and maintenance**

ZXMP S385 supports mixed insertion of boards, easing service configuration and network planning & optimization. System operation adopts front-facing interfaces, easier for maintenance.

ZXMP S385 employs pluggable optical modules (SFP module, LC connector) and supports ALS functions; various optical boards and boards share spare parts, driving down cost. It supports online optical power detection for all optical interfaces, facilitating rapid location of line failure and boosting maintenance efficiency.

Highly integrated equipment results in lowered expenditure for space; low power consumption reduces electricity expense.

**Customer Benefits**

- Robust intelligence, enhanced network survivability, boosted O&M efficiency
Combination of protection and restoration greatly improves network survivability; plug and play network node allows operators to implement network architecture optimization and operation & maintenance with ease; supports differentiated classes of services, satisfying customers’ demands; supports traffic engineering, balances network loads and improves resource utilization.

- **Strong networking dispatch functions to boost network profitability and cut CAPEX**

Flexible multi-service access functions, highly integrated service interface boards are available to enable access of vast PDH, SDH and data services, accommodating the requirement for large-capacity service access.

- **Excellent scalability to protect investment and drive down OPEX**

With smooth evolution capability and scalability, ZXMP S385 allows customers to achieve the effect of a newly-built backbone layer only by adding or replacing cards, significantly reducing the secondary construction cost. Support for vast E1 services enables legacy dispatch equipments to extend to integrated equipment capable of dropping services. Features adaptable to metro services maximize customers’ return on investment.

- **Powerful RPR function and support for IP-based network evolution to protect investment**

It offers robust processing capability for data services, supports dual-ring operation, supports unicast, multicast and broadcast services, implements bandwidth statistic multiplexing to increase bandwidth utilization, features rapid service provisioning, service priority access control and total network fairness mechanism and guarantee high Qos. It breaks RPR single ring restriction, enabling more flexible networking, avoiding service dropping and forwarding and reducing failure points.

- **Redoubled embedded WDM functions to save optical fiber resources**

Support wavelength-level add/drop multiplexing of optical signals.

- **Flexible design to ease network planning and optimization**

Support mixed insertion of boards, leaving it easy for service configuration, maintenance and network planning and optimization.

- **Extensive market applications, mature technology and high reliability**

By virtue of its mature technology and outstanding performance, ZXMP S385 has been widely deployed by China’s top 5 operators and private network customers, and has seen wide deployment in multiple countries and regions around the world, including Korea, Pakistan, Morocco and Vietnam.