

NetRing® 2500

STM-16/4/1 MULTI-SERVICE OPTICAL TRANSPORT PLATFORM

COMPACT NEXT GENERATION MSTP SYSTEM DELIVERS COST-EFFECTIVE SERVICES AND INTEGRATED FUNCTIONALITY



- **SMALL FOOTPRINT**
- **MULTI-SERVICE**
- **FULL PROTECTION**
- **DISTRIBUTED DESIGN**

NetRing® 2500 is a multi-service optical transport system designed to simplify service provider networks, dramatically reducing both operational and capital expenditures. The system enables the delivery of SDH services and advanced data services – including ATM, FE and GE – rapidly, efficiently and cost-effectively. The highly integrated NetRing 2500 platform unifies the functions of a next-generation SDH Add-Drop Multiplexer (ADM), Digital Cross-connect System (DCS), ATM/Ethernet aggregation switch and integrated Resilient Packet Ring (RPR) in a single carrier-class shelf.

DISTRIBUTED CROSS-CONNECT DESIGN

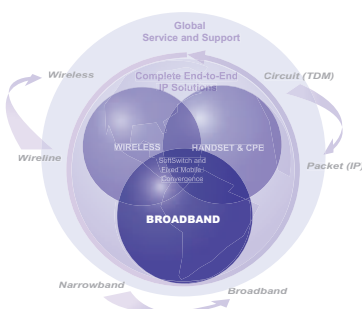
NetRing 2500 utilizes a distributed cross-connect architecture, which significantly reduces the cost of entry. Due to its extensive network adaptability, NetRing 2500 is suitable for access, LAN, MAN networks. Its distributed cross-connect architecture enables a pay-as-you-grow strategy based on the required number of optical interfaces and the interface rate.

MULTI-SERVICE PROVISIONING

NetRing 2500 supports continuous and virtual concatenation at VC-12/4/3. It also supports Generic Framing Procedure (GFP), Link Capacity Adjustment Scheme (LCAS), and has built-in Ethernet service functions. GFP protocol is used to map FE/GE services into NxVC-12/4/3 for transmission. In addition, the platform supports Layer 2 switching and flow control. NetRing 2500 supports ATM service, providing STM-1 and Inverse Multiplexing for ATM (IMA) interfaces.

FULL SUITE OF PROTECTION SCHEMES

NetRing 2500 provides a full suite of network-level protections including SDH 1+1 MSP; 1:N MSP; 2/4F Unidirectional MS-SPRING. The platform supports 1+1 hot redundant control and timing (clock) modules. NetRing 2500 also provides electrical protections for E1/T1 and DS3/E3/E4/STM-1e.



HARDWARE

SYSTEM CHASSIS

DIMENSIONS

- 175 x 436 x 281mm (HxWxD)

WEIGHT

- 15Kg fully loaded

TEMPERATURE

- 0°TO 50°C (32TO 122°F)

HUMIDITY

- 5TO 95% non-condensing

POWERSUPPLY

- -48VDC

POWER CONSUMPTION

- 135W fully loaded

COMPLIANCE

- FCC Part 15 Class A, UL1950,VCCI, Latest ITU-T standards , IEEE802.3, 802.3Uz/ad;802.1q/p/d/s/w

INTERFACE

NETWORK

STM-16

- 1 port per module, max 4 ports per shelf

STM-4

- 1/2/4 port per module, max.20 ports per shelf

STM-1

- 1/2/4 port per max.32 ports per shelf

TRIBUTARY

10/100BASET ETHERNET

- 8 ports per module , max.48 ports per shelf

1000BASESX ETHERNET

- 2 ports per module, max.12 ports per shelf

STM-1/E4 ELECTRICAL

- 4 ports per module, max.24 ports without protection per shelf
- 4 ports per module, max 8 ports with protection per shelf

E1

- 63/32 ports per module, max.378 ports without protection per shelf
- 32 ports per module, max 63 ports with protection per shelf

T1

- 56/28 ports per module, max.336 ports per shelf
- 56/28 ports per module, max 56 ports with protection per shelf

E3/D3

- 3 ports per module, max.18 ports without protection per shelf
- 3 ports per module, max.6 ports with protection per shelf

V.35

- 8 ports per module, max.48 ports per shelf

CROSS-CONNECTION

SDH CAPACITY

- 80X80 VC-4 & 2016 X2016 VC-12

TYPE

- Unidirectional, Bi-directional, Broadcast, Multicast, Drop and Continue

DATA SERVICE

FRAMING AND CONCATENATION

GFP, Continuous concatenation and Virtual concatenation at VC-12/VC-3/VC-4

ATM

RPR

A0/A1/B(EIR & CIR)/C, Wrapping/Steering

10M/100M BASE-T

802.1d/p/q/s, 802.3x/ad, VLAN Tagging, VLAN trucking,Rate limiting from 100kbps, 100kbps incremental, LCAS.

GBE

802.3z

PROTECTION SCHEMES

SDH: 1+1 MSP;1:N MSP;2/4F Unidirectional MS-SPRing
Tributary:1:5 E1/T1 CFP, 1:4 E3/DS3 CFP, 1:4 STM-1e/E4 CFP

TIMING/SYNCHRONIZATION

- SSM, External Bits Clock of Stratum 3 or better, Primary and secondary E1/T1 external timing references, STM-n/OC-n line timing reference.Hold over, Free runs.

NETWORK MANAGEMENT

- TL1, LCT (local Craftsman Terminal), NetMan™ 6000 OMC-O (EMS), TMF814

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