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NEC

SpectralWave

MN1200E

Multi-Service Optical Transport Platform
- Indoor Application -

**COMPACT THIRD GENERATION MSTP SYSTEM
COMBINES VERSATILE SERVICE DELIVERY AND
BROADEST FUNCTIONALITY SET**

The MN1200E is a third generation multi-service optical transport device that effectively combines and delivers separate functions, previously attributed to multiple independent platforms. These functions include Terminal Multiplexer (TM), Add-drop Multiplexer (ADM), Digital Cross-connect System (DCS), and Ethernet switching and aggregation. This integration drastically reduces service provider network complexity and simplifies network operations and maintenance.

- **SMALL FOOTPRINT**

- **MULTI-SERVICE**

- **FULL PROTECTION**

- **SDH UNIFIED DELIVERY**

- **WALL MOUNTABLE**

TINY FOOTPRINT

The compact MN1200E is only 1U high. It provides versatile service access capabilities and an unprecedented price/performance ratio. The MN1200E can be mounted in a standard 19-inch rack, ETSI rack, or on a wall or desktop.

FULL FUNCTIONALITY

The MN1200E essentially simplifies new deployments and extends the life of legacy SDH networks, enabling carriers that are planning on providing next-generation services, to realize substantial savings on capital and operational expenditures. The MN1200E is able to add/drop various low-rate signals including E1, E3/DS3 and Ethernet directly into/from 155Mbits SDH signals. The MN1200E provides cross-connect functionality at VC-12 & VC-3. The MN1200E has built-in native Ethernet service support. It uses the GFP protocol to map FE Ethernet services into NxVC-12 or NxVC-3 for transmission, and provides sophisticated Layer 2 switching, traffic shaping, management, and LCAS.

FULL SUITE OF PROTECTION SCHEMES

The MN1200E provides a full suite of network-level protections including STM-1 1+1 Linear MSP and VC-12/VC-3 SNCP. The platform supports 1+1 -48V power supply input.

Technical Summary

HARDWARE

SYSTEM CHASSIS

DIMENSIONS	45(H) x 483(W) x 243(D) mm
WEIGHT	5kg
OPERATING TEMPERATURE	5 °C to 40 °C
POWER SUPPLY	−48V DC
POWER CONSUMPTION	21W without extension module
COMPLIANCE	FCC Part 15 Class A, UL1950, VCCI, CE
HUMIDITY	5 %RH ~85% RH@30 °C

INTERFACE

NETWORK INTERFACE

STM-1 : 2 ports. SFP optical transceivers, S1.1, L1.1 or L1.2 with LC connector

Access Capacity

2 x STM-1 optical interfaces

3 x E3/DS3 interfaces

16/64* x E1 interfaces (75ohm or 120ohm) (*w/ extension card)

48* x T1 interfaces (100ohm) (*w/ extension card)

6 x FE electrical interfaces w/ L2

2 x FE optical interfaces w/ L2

2 x GE optical interfaces w/ L2

1 x 19.2 kbit/s transparent user channel

1 x 64 kbit/s transparent user channel (w/ optional card)

1 x EOW interface (w/ optional EOW module)

6 x house keeping alarms (four inputs and two outputs)

CROSS-CONNECTION

SDH CAPACITY	504 x 504 VC-12 or 24 x 24 VC-3
TYPE	Unidirectional, Bi-directional, Broadcast, Drop and Continue

TIMING/SYNCHRONIZATION

SSM
Trace with line clock or the 1st and 2nd tributary clock
Free run with the internal oscillator ± 4.6 ppm
Holdover ± 0.05 ppm
The 1st and 2nd E1 interfaces can be used as 2 Mbit/s external clock interfaces using the S1 byte.
All E1 interfaces can provide retiming functions and can be used to transmit timing signals

NETWORK MANAGEMENT

TL1, LCT (Local Craft Terminal), SpectralWave MN9100(EMS)

⚠️ Safety Precautions | ★ Before installing, connection or using this product, be sure to carefully read and observe the cautionary and prohibited matters provided in the instruction manual.

For inquiries, contact :