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.

**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.

Published by:
NEC Corporation
Global Network Division

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