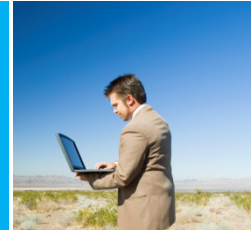# NPT-1010

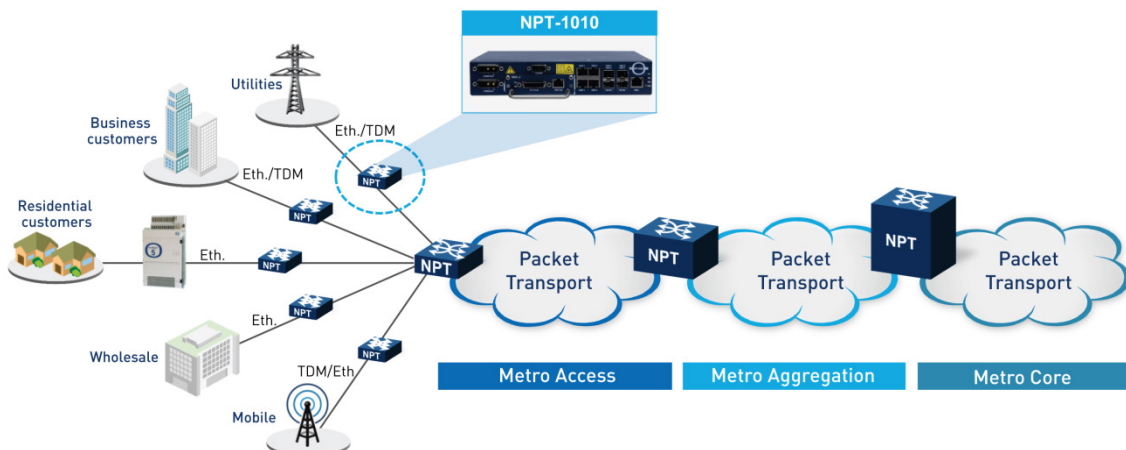## Managed Packet Transport Demarcation Device

- **Fully managed MPLS-TP and Ethernet demarcation unit via local and in-band remote management**
- **Carrier class availability - including sub 50 msec switchover and enhanced protection and resiliency schemes**
- **Flexible architecture – optional CES and 1588 v2 support**

- **Extensive OAM over all links with multilayer control, monitoring, line testing, and loopback for remote fault isolation**
- **Miniature size – only 8.8" (22.4 cm) wide and 1RU in height**

The NPT-1010 is an extremely compact and intelligent managed packet transport demarcation device, supporting an extensive range of Ethernet/MPLS-TP MEF-based services. Located at the front edge of a carrier-class packet transport to customer equipment, it combines carrier-grade availability, including sub-50 msec switchover, DC dual-power feed, and extended temperature range, with extensive OAM over all links and in-band management, allowing service differentiation and SLA enforcement across the service provider's network, all the way to the customer premises. Support of legacy TDM over Ethernet/MPLS via CES enables operators to preserve revenues from

existing TDM services over managed Carrier Ethernet transport networks, while allowing their customers to protect past investments in legacy equipment (PBX, 2G/3G BTS, routers with E1/T1 I/Os).

The NPT-1010 supports carrier-class MEF CE2.0 services (L2, MPLS-TP), and includes also built-in SyncE and PoE+. Accompanied by optional CES and 1588v2 support, the NPT-1010 is an ideal choice for business and triple-play services, as well as for LTE/4G next-generation backhauling.

The NPT-1010 is managed by ECI's EMS-APT and LightSoft® unified multilayer GUI-based NMS, supporting SNMP V3 traps for monitoring.

Technical Specifications

Services, Synchronization, and Protection

Ethernet interfaces	10/100/1000 Mbps
Ethernet and MPLS-TP technologies	Native Ethernet and MPLS-TP over Ethernet, CES SAToP, CESoPSN
Synchronization	SyncE, 1588v2
Services	MEF CE2.0 based E-Line (EPL,EVPL), LAN(EPLAN, EVPLAN) ,E-Tree (rooted multipoint) (EP-Tree, EVP-Tree), E-Access MPLS-based services VPWS, VPLS, P2MP Multicast (LSP) Tree
Protection and restoration	MSTP, G.8032 Ethernet Ring Protection (ERP), Link aggregation (LAG), MPLS-TP, FRR, Dual FRR, 1:1 Linear protection, PW Redundancy

System Capacities

Packet capacity and throughput	5 Gb
MAC bridging (IEEE802.1d)	32K
Classes of Service (IEEE802.1p)	8
Two-rate, three-color policers (CIR/CBS, EIR/EBS)	2K
Number of services (VSIs) / MPLS-TP Tunnels	1K
Max. Ethernet	4 x 10/100/1000BaseT with PoE+ 4 x 100/1000BaseT/X
Max. E1/T1 CES	8
Operation Administration & Maintenance (OAM)	IEEE 802.3ah, IEEE 802.1ag (CFM), Fast BFD for LSP and section, Y.1731 (PM)
Pluggable SFP support	Electrical Colored C/DWDM, non-colored and bidirectional SFPs

Other Specifications

Power over Ethernet (PoE+)	Up to 30W
Power input	NPT-1010DC : -40 VDC to -75 VDC, NPT-1010AC : 90 VAC to 220 VAC
Power dissipation (Typical)	30 W (W/O PoE)
Operating temperature range	-25°C to +70°C -13°F to 158°F
Operating RH range	5% to 95%
Environmental standards	IEEE 1613 (electric utility substations) IEC 61850-3 (electric utility substations) ETS 300 019-1-3 Class 3.3, EN55022
Safety	EN 60950/2000, according to LVD Directive 72/23/EEC EN 60825-1&2
EMC	EN 300 386-2, 1TR9
Security	RADIUS (client authentication), SSH 2.0, SW integrity checking (SHA-2), SFTP, ACL
Management	End-to-end management of all layers and services and SNMP V3 traps
Physical dimensions	44mm(H) x 223.5mm(W) x 224mm(D)/17.3"(H) x 8.8"(W) x 8.82"(D)

Specifications subject to change without notice

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