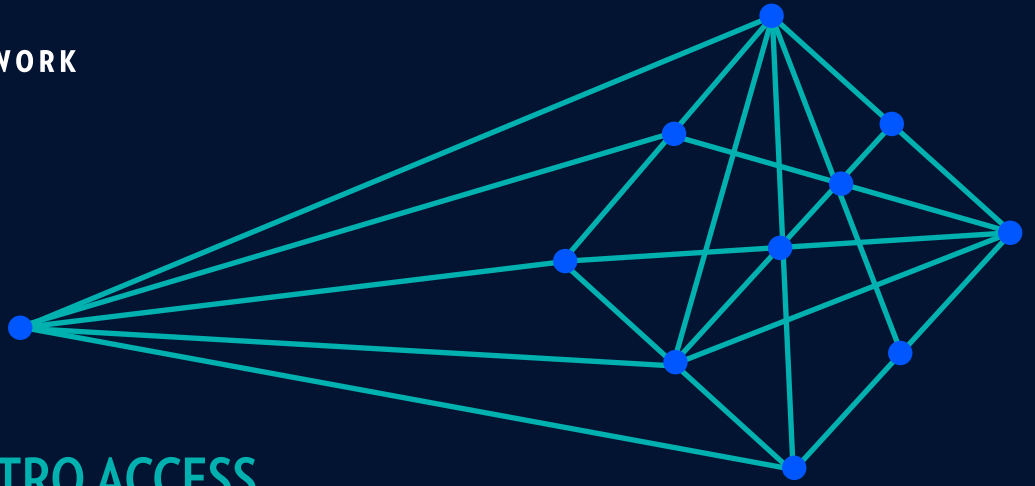


NEPTUNE NPT-1050

HIGH CAPACITY METRO ACCESS TRANSPORT FOR PACKET AND TDM



Netptune (NPT) is a family of carrier-class MPLS-based multiservice packet-optical transport platforms, offering best-in-class Carrier Ethernet and packet transport solutions for the metro. Neptune streamlines end-to-end metro service delivery by combining carrier-grade service assurance, visibility, and control, with packet efficiency and unparalleled L1 to L3 multiservice support. Neptune offers converged support for Ethernet, MPLS, TDM, OTN, and WDM to provide a powerful, flexible solution for high-performance services and Elastic MPLS. SDN and NFV capabilities allow Neptune to evolve to meet the rapidly changing metro environment.



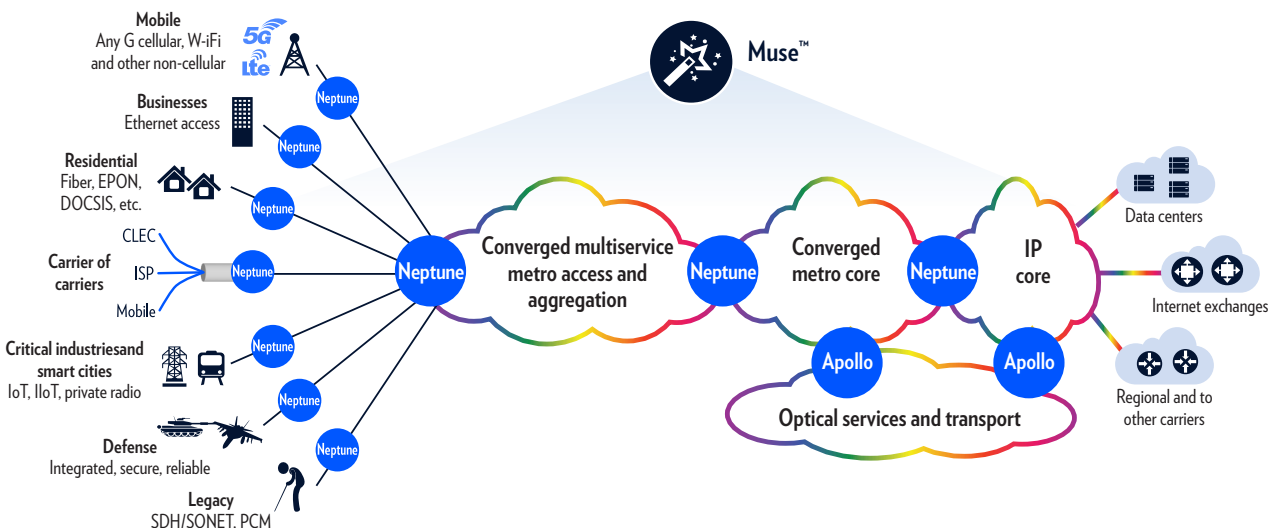
NPT-1050 is a compact, fully-redundant, modular, multiservice packet transport platform, which is 1RU in height and supports Ethernet, TDM and MPLS-TP with up to 100Gbps in packet switching and a 15Gbps TDM matrix. Support for native TDM and TDM over CES/CEP make NPT-1050 ideal for operators looking for a modern metro access packet platform on which to evolve their legacy TDM network. With such a rich and robust feature set, NPT-1050 is well-suited for a wide variety of applications and networking scenarios. These include; CES for TDM migration, mobile backhaul, wholesale services, residential multiplay, business VPNs, and mission-critical service delivery. Like all ECI's transport products, NPT-1050 is managed by ECI's Muse™ software suite.

Elastic multiservice

Carrier-grade service assurance

Fully-managed across TDM and packet

Elastic scalability



Technical specifications

| | |
|---------------------------------|---|
| Packet | Switch: 100 Gbps Services: MEF CE2.0 (E-Line, E-LAN, E-Tree, E-Access) PN and VPN based Ethernet and IP, MPLS -TP Max. Interfaces: 20 x 10/100/1000 Base-T, 40 x 100/1000 Base-X, 10 x 10GE |
| TDM | Matrix: 15 Gbps with 4/3/1 connectivity (100% LO granularity) Services: Native TDM, CES (SATO, CESoPSN and CEP) Max. native Interfaces: 5 x STM-16, 14 x STM-4, 14 x STM-1, 9 x DS3/E3, 189 x E1 Max. CES interfaces: 96 x E1/T1, 12 x STM-1/OC-3, 3 x STM-4/OC-12 |
| WDM | CWDM, DWDM, muxponder, amplifiers |
| Timing and synchronization | SyncE with ESMC, 1588v2, external timing 1PPS and TOD, internal stratum 3 clock (holdover state), primary and secondary sources (supports SSM bits), ACR, DCR, loop timing on SAToP, TDM bits (T3/T4), and SNTP |
| Protection and restoration | Hardware redundancy for common units, IO hardware Protection (IOP), RSTP/MSTP, G.8032 Ethernet Ring Protection (ERP), MPLS-TP FRR, Dual FRR, 1:1 Linear protection, PW Redundancy (PWR), Multisegment-PW, IEEE 802.3ad Ethernet Link Aggregation (LAG) with LACP, Multi-Chassis LAG (MC-LAG) |
| OAM | Ethernet OAM (IEEE802.3ah, IEEE 802.lag and ITU-T Y.1731 PM), MPLS-TP OAM (G8113.2)(CC/AIS/RDI/LB/LT/DM), Bidirectional Forwarding Detection (BFD), RFC 2544 generator, Y.1564 Ethernet service activation (SLA) |
| Traffic management | Traffic classification (based on port, VLAN, Port+VLAN, IEEE 802.1p, DSCP), Diffserv based TM, network-wide Call Admission Control (CAC), 8 Classes of Service (CoS) |
| Topologies | Mesh, dual homing, multiring, ring, star, linear |
| Security | RADIUS (client authentication), SSH 2, SW integrity verification (SHA-2), SFTP, Access Control List (ACL), IEEE802.1x, control channel HMAC-256, Public key authentication, Port blocked as default |
| Management | LightSOFT® NMS, EMS-NPT, SNMPv2/v3, LCT, Muse™ |
| Power over Ethernet (PoE+) | Up to 30W |
| Pluggable SFP/CSFP/SFP+ support | Electrical, colored C/DWDM, tunable, noncolored, Compact SFP (CSFP), SFP+, and bidirectional SFPs/SFP+ |
| Power input | -40 VDC to -72 VDC, 220V |
| Power dissipation | Typical: 150W |
| Operating temperature range | -25°C to +70°C (-13°F to 158°F) |
| Operating RH range | 5% to 95% |
| Environmental standards | ETS 300 019-1-3 Class 3.3, ETS 300 019-2-3 Class 3.3, EN55022 Radiation Emissions (class A), IEEE 1613 (electric utility substations), IEC 61850-3 (electric utility substations), EN 61000-6-5 (immunity for substations) |
| Safety | EN60950-1 |
| EMS | EN 300 386 |
| Physical dimensions | H x W x D: 1.7" x 18.3" x 10.4" / 44 x 465 x 263 mm |

EXPANSION UNIT

| | |
|---------------------|---|
| OTN | Services: Ethernet, storage, video, SDH/SONET Max. service interfaces: <ul style="list-style-type: none"> • 48 x 1GE, STM-1/4/OC-3/12/FC-1 • 24 x STM-16/OC-48/FC-2 • 12 x FC-4 • 3 x 10GbE/FC-8/FC-12/STM-64/OC-192 • 30/24/12 x SDI/HD-SDI/HD-SDI3G Max. transport interfaces: 24 x OTU-1, 3 x OTU-2/e |
| Packet | Max. service Interfaces: 36 x 10/100base-T, 36 x 100 base-X 12x100/1000 Base-X, 24 x 10/100/1000 Base-T |
| TDM | Max. service interfaces: <ul style="list-style-type: none"> • Native: 189 x E1, 9 x E3/DS3, 12 x STM-1 • CES: 96 x E1 • Native or CES: 72 x (n x 64Kbps ,FXO, FXS, 2/4W E&M, V24 (RS232), V35, V36 ,V11, RS422, RS449, C37.94, OMNI, CODIR, G.703 64K over TDM or packet |
| Physical dimensions | H x W x D: 3.5" x 17.4" x 9.6" / 88 x 443 x 243 mm |

Specifications subject to change without notice

Contact us to find out how our ELASTIC networks can help your business grow



ABOUT ECI

ECI is a global provider of ELASTIC network solutions to CSPs, critical industries, and data center operators. With the advent of 5G, IoT, and smart everything, traffic demands are increasing dramatically, and network operators must make smart choices as they evolve their infrastructure. ECI's Elastic Services Platform leverages our programmable packet and optical networking solutions, along with our service-driven software suite and virtualization capabilities, to provide a robust yet flexible solution for any application. ECI solutions are tailored for the needs of today, yet flexible enough to meet the challenges of tomorrow. For more information, visit us at www.ecitele.com