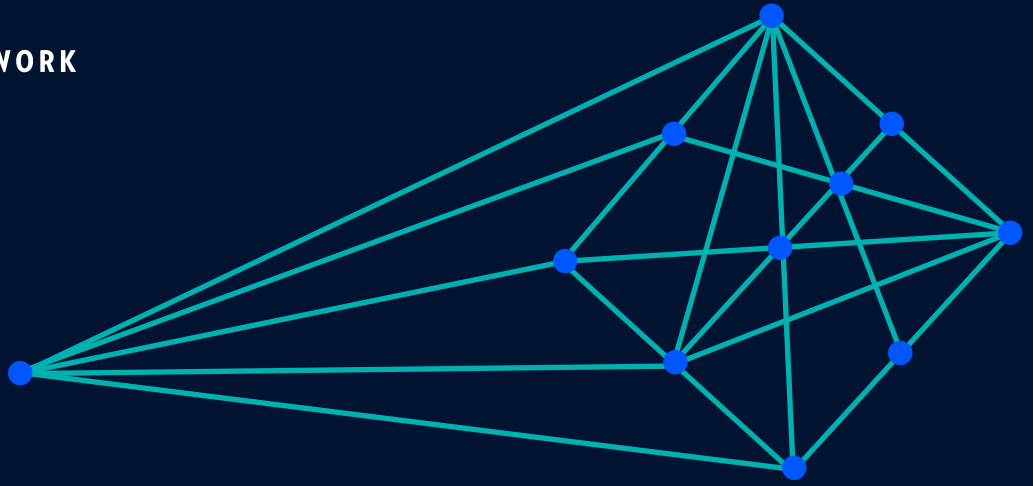


NEPTUNE NPT-1200

HYBRID METRO ACCESS AND AGGREGATION TRANSPORT

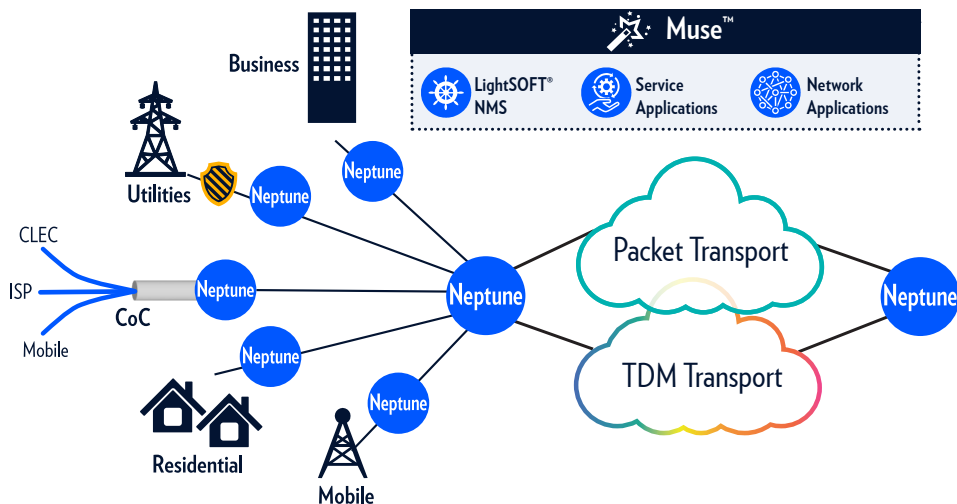


NPT-1200 is a compact, high-capacity Hybrid multiservice transport platform. A member of ECI's Neptune (NPT) product line, the Hybrid NPT-1200 is only 2RU in height, fully redundant, supports up to 320 Gbps capacity, and is optimized for high-capacity metro access and aggregation nodes. The Neptune product line streamlines end-to-end metro service delivery by combining carrier-grade service assurance, visibility, and control with packet efficiency and unparalleled multiservice support. This includes native TDM, Packet, and OTN. It offers a powerful, flexible, and efficient E2E metro solution for high-performance services through convergence of Ethernet (MEF CE2.0 certified), MPLS-TP, OTN, WDM, and TDM. Neptune also supports NFV services and SDN applications, which are compulsory in today's challenging metro environment.



With such a rich and robust feature set, NPT-1200 is well-suited for a wide variety of applications and networking scenarios. These include mobile backhaul, wholesale services, residential multi-play and business VPN connectivity services, mission-critical infrastructure, and embedded cyber security solutions. As with all ECI's transport products, NPT-1200 is managed by the Muse™ software suite.

<p>Unmatched multiservice TDM, Ethernet, MPLS-TP, OTN</p>	<p>Compact and high-capacity Metro access and aggregation</p>	<p>Carrier-grade redundancy and service assurance</p>	<p>Independent native processing both TDM and Ethernet</p>
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Technical specifications

Packet	Switch: 100 Gbps/320 Gbps Services: MEF CE2.0 (E-Line, E-LAN, E-Tree, E-Access) PN and VPN based Ethernet and IP, MPLS (TP and IP), Ethernet over SDH (EoS), MPLS over Transport (MoT) Max. Interfaces (100 Gbps configuration): 48 x 100/1000 FX, 10 x 10GE OTN Max. Interfaces (320 Gbps configuration): 64 x 100/1000 FX, 32 x 10GE OTN
TDM	Matrix: 40 Gbps with 4/3/1 connectivity (100% LO granularity) Services: Native TDM, CES (SAToP, CESoPSN, and CEP) Max. Native Interfaces: 2 x STM-64, 15 x STM-16, 36 x STM-4, 36 x STM-1, 21 x DS3/E3, 441 x E1 Max. CES Interfaces: 196 x E1/T1, 24 x STM-1/OC-3, 6 x STM-4/OC-12
WDM	CWDM, DWDM, muxponder, amplifiers
Timing and synchronization	SyncE with ESMC, 1588v2, external timing 1PPS and TOD, internal stratum 3E 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	HW 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), Multi Segment-PW, IEEE 802.3ad Ethernet Link Aggregation (LAG) with LACP, Multi Chassis LAG (M-LAG)
OAM	Ethernet OAM (IEEE 802.1ag and ITU-T Y.1731 PM), MPLS-TP OAM (G8113.2), RFC 5860, Bidirectional Forwarding Detection (BFD), LDI, LSP-Ping, LSP Trace-route, RFC 2544 Generator
Traffic management	Traffic classification (based on Port, VLAN, Port+VLAN, IEEE 802.1p, IPv4/IPv6 TOS and DSCP), Diffserv based TM, Network wide Call Admission Control (CAC), 8 Classes of Service (CoS)
Topologies	Mesh, dual homing, multi-ring, ring, star, linear
Security	RADIUS (client authentication), SSH 2, SW integrity checking (SHA-2), SFTP, Access Control List (ACL), IEEE802.1x, control channel HMAC-256, Private/Public key authentication, Port blocked as default
Management	Muse software suite, LightSOFT® NMS, EMS-NPT, SNMPv2/v3, LCT
Power over Ethernet (PoE+)	Up to 30W
Pluggable support	Electrical, colored C/DWDM, tunable, non-colored, Compact SFP (CSFP), SFP+, and bidirectional SFPs/SFP+
Power input	-40 VDC to -72 VDC, 110 VAC to 230 VAC
Power dissipation	Typical: 300W
Operating temperature range	-25°C to +70°C (-13°F to 158°F) (100G), -5°C to +50°C (23°F to 122°F) (320G)
Operating RH range	5% to 95%
Environmental standards	NEBS -GR-63 Core, GR-1089 Core, ETS 300 019-1-3 Class 3.3 (100G) Class 3.2 (320G), EN55022 radiation emissions (Class A), IEEE 1613 (electric utility substations), IEC 61850-3 (electric utility substations), EN 61000-6-5 (Immunity for substations)
Safety	EN 60950/2000, according to LVD Directive 72/23/EEC, EN 60825-1&2
EMC	EN 300 386-2, FTZ 1TR9, EN55032 radiation emissions (Class A)
Physical dimensions	H x W x D: 3.5" x 18.3" x 9.6" / 88 x 465 x 243 mm

EXPANSION UNIT

OTN	Services: Ethernet, storage, video, SDH/SONET Max. Service interfaces: 48 x 1GE, 3 x 10GE, 24/12/8/3/3 x FC-1/2/4/8/10, 9 x (SDI, HD-SDI, DVB-ASI), 30 x (STM-1/4/16, OC-3/12/48), 3 x STM-64/OC-192, 24 x OTU-1, 3 x OTU-2 Max. transport interfaces: 24 x OTU-1, 3 x OTU-2, 3 x OTU-2e
Packet	Max. service interfaces: 36 x 100/1000 FX, 36 x 1GE
TDM	Max. Service interfaces: <ul style="list-style-type: none"> Native: 189 x E1, 9 x E3/DS, 12 x STM-1/OC-3 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, utilities as well as data center operators. Along with its long-standing, industry-proven packet-optical transport, ECI offers a variety of SDN/NFV applications, end-to-end network management, a comprehensive cyber security solution, and a range of professional services. ECI's ELASTIC solutions ensure open, future-proof, and secure communications. With ECI, customers have the luxury of choosing a network that can be tailor-made to their needs today - while being flexible enough to evolve with the changing needs of tomorrow. For more information, visit us at www.ecitele.com