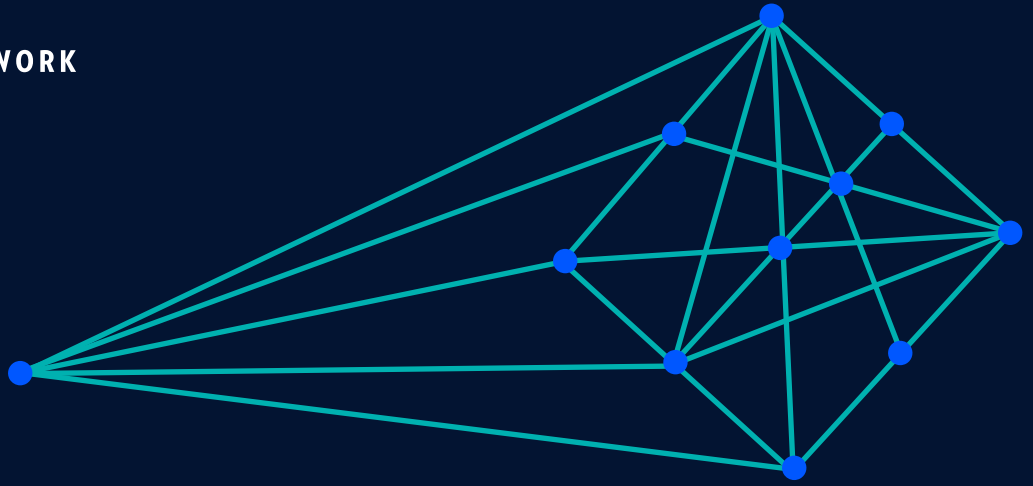


# NEPTUNE NPT-1050

## L1 TO L3 METRO ACCESS TRANSPORT



The NPT-1050 is an extremely compact, high-capacity MPLS- based (IP and TP) multiservice packet transport platform. A member of ECI's Neptune (NPT) product line, NPT-1050 is only 1RU in height, fully redundant, supports up to 200 Gbps capacity, and is optimized for high-capacity metro access 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 L1 to L3 multiservice support. Neptune offers a powerful, flexible, and efficient E2E metro solution for high-performance L1 to L3 services. It achieves this by converging IP, Elastic MPLS (IP and TP), Ethernet (MEF CE2.0 certified), OTN, WDM, and TDM. Neptune also supports NFV services and SDN applications, which are compulsory in today's challenging metro environment.



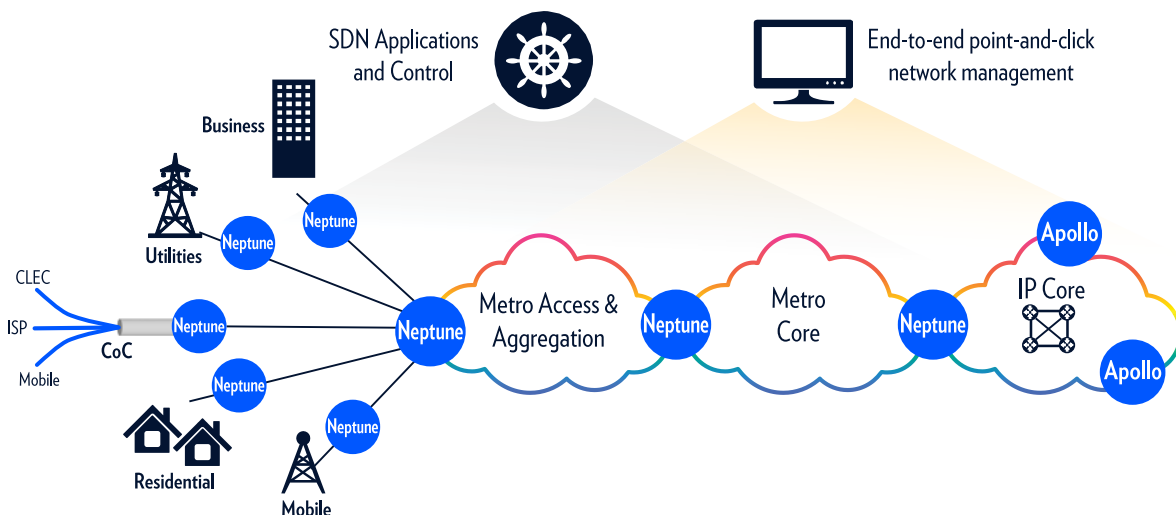
With such a rich and robust feature set, the NPT-1050 is well-suited for a wide variety of applications and networking scenarios. These include mobile backhaul, wholesale services, residential multiplay and business VPN connectivity services. Like all ECI's transport products, NPT-1050 is managed by the unified multilayer LightSOFT® NMS.

**Unmatched multiservice**  
from L1 to L3

**Compact and high-capacity**  
metro access

**Carrier-grade**  
redundancy and service assurance

**Elastic MPLS**  
both IP and TP



# Technical specifications

Packet	<b>Switch:</b> 100 Gbps/200 Gbps <b>Services:</b> MEF CE2.0 (E-Line, E-LAN, E-Tree, E-Access) PN and VPN based Ethernet and IP, MPLS (TP and IP), multicast and IPTV <b>Max. Interfaces (100 Gbps configuration):</b> 20 x 10/100/1000 Bas-T, 40 x 100/1000 Base-X, 10 x 10GE <b>Max. Interfaces (200 Gbps configuration):</b> 20 x 10/100/1000 Bas-T, 40 x 100/1000 Base-X, 20/12 x 10GE/10GBE OTN
TDM	<b>Services:</b> CES (SATO P, CESoPSN and CEP) <b>Max. Interfaces:</b> 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), Virtual Router Redundancy Protocol (VRRP), Multisegment-PW, IEEE 802.3ad Ethernet Link Aggregation (LAG) with LACP, Multi Chassis LAG (MC-LAG)
OAM	Ethernet OAM (IEEE802.3ah, IEEE 802.1ag and ITU-T Y.1731 PM), IP/MPLS OAM (LSP Ping, LSP Trace-route), MPLS-TP OAM (G8113.2) (CC/AIS/RDI/LB/LT/DM), Bidirectional Forwarding Detection (BFD), RFC 2544 Generator, Y.1564 -Ethernet service activation (SLA), RFC 5357 Two-Way Active Measurement Protocol (TWAMP)
Traffic management	Traffic classification (based on Port, VLAN, Port+VLAN, IEEE 802.1p, IPv4/IPv6 TOS and DSCP), Diffserv based TM, network Connection Admission Control (CAC), 8 Classes of Service (CoS)
Topologies	Mesh, dual homing, multiring, ring, star, linear
Security	RADIUS (client authentication), SSH 2, SSA SW integrity checking (SHA-2), SFTP, Access Control List (ACL), IEEE802.1x, control channel HMAC-256, Public key authentication, port blocked by default
Management	LightSOFT® NMS, EMS-NPT, SNMPv2/v3, LCT, Muse™, CLI, OpenFlow, NETCONF/YANG
Power over Ethernet (PoE+)	Up to 30W
Pluggable SFP/CSFP/SFP+ support	Electrical, Colored C/DWDM, Tunable, non-colored, Compact SFP (CSFP), SFP+, and bidirectional SFPs/SFP+
Power input	-40 VDC to -72 VDC, 220V
Power dissipation	Typical: 150W
Operating temperature range	-40°C to +70°C (-40°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, 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	<b>Services:</b> Ethernet, storage, video, SDH/SONET <b>Max. service interfaces:</b> <ul style="list-style-type: none"> <li>• 48 x 1GE, STM-1/4/OC-3/12/FC-1</li> <li>• 24 x STM-16/OC-48/FC-2</li> <li>• 12 x FC-4</li> <li>• 3 x 10GbE/FC-8/FC-12/STM-64/OC-192</li> <li>• 30/24/12 x SDI/HD-SDI/HD-SDI3G</li> </ul> <b>Max. transport interfaces:</b> 24 x OTU-1, 3 x OTU-2/e
Packet	Max. service interfaces: 36 x 10/100base-T, 36 x 100 base-X
TDM	Max. service interfaces: CES: 96 x E1 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 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](http://www.ecitele.com)