

# Neptune NPT-1010

## Compact Packet CPE

Neptune (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, 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.



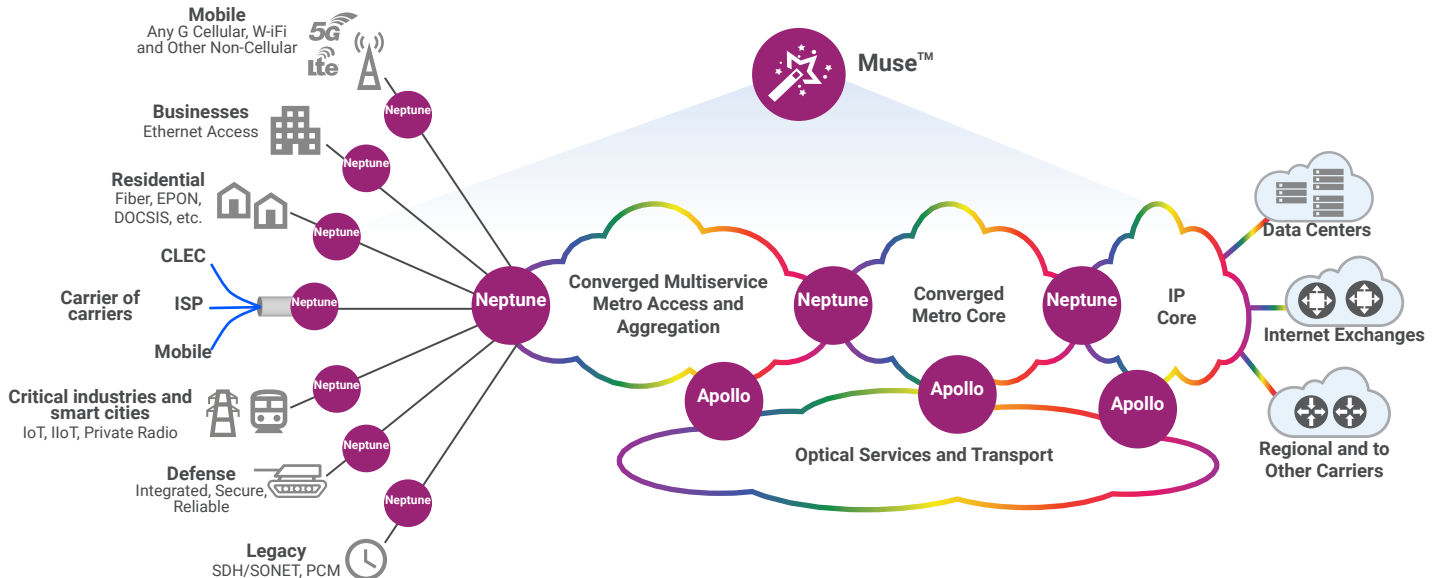
NPT-1010 is an extremely compact, fully-managed, packet CPE, supporting Ethernet, TDM, and MPLS-TP. Its 1RU height and 5Gbit/s capacity make it a perfect fit for customer premise demarcation points and the Ethernet interfaces efficiently utilize the access infrastructure. With such a rich and robust feature set, NPT-1010 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-1010 is managed by Ribbon's Muse™ software suite.

**Elastic  
Multiservice**

**Carrier-Grade  
Service Assurance**

**Fully-Managed  
CPE**

**Elastic  
Scalability**



## Technical Specifications

<b>Packet</b>	Switch: 5 Gbps Services: MEF CE2.0 (E-Line, E-LAN, E-Tree, E-Access) PN and VPN based Ethernet and IP, MPLS-TP Max. Interfaces: 8 x 10/100/1000BaseT with 4 x 100/1000BaseT/X PoE+
<b>TDM</b>	Services: CES (SATO, CESoP SN) Max. CES Interfaces: 8 x E1/T1
<b>WDM</b>	CWDM, DWDM, amplifiers
<b>Timing and Synchronization</b>	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, and SNTP
<b>Protection and restoration</b>	RSTP/MSTP, G.8032 Ethernet Ring Protection (ERP), MPLS-TP FRR, 1:1 Linear protection, PW Redundancy (PWR), multi segment-PW, IEEE 802.3ad Ethernet Link Aggregation (LAG) with LACP, Multi-chassis LAG (MC-LAG) Aggregation (LAG) with LACP, Multi Chassis LAG (MC-LAG)
<b>OAM</b>	Ethernet OAM (IEEE802.3ah, IEEE 802.1ag 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)
<b>Traffic management</b>	Traffic classification (based on Port, VLAN, Port+VLAN, IEEE 802.1p and DSCP), diffserv based TM, network Connection Admission Control (CAC), 8 Classes of Service (CoS)
<b>Topologies</b>	Mesh, dual homing, multi-ring, ring, star, linear
<b>Security</b>	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 Public key authentication, port blocked by default
<b>Management</b>	MUSE software suite, MUSE LightSOFT® NMS, EMS-NPT, SNMPv2/v3, LCT, LightAPPS, CLI, NETCONF/YANG, PCEP, BGP-LS
<b>Power over Ethernet (PoE+)</b>	Up to 30W
<b>Pluggable SFP support</b>	Electrical, colored C/DWDM, non-colored bidirectional SFPs
<b>Power input</b>	-40 VDC to -72 VDC, 110 VAC to 230 VAC
<b>Power dissipation</b>	Typical: 30W
<b>Operating temperature range</b>	-40°C to +70°C (-40°F to 158°F)
<b>Operating RH range</b>	5% to 95%
<b>Environmental standards</b>	NEBS-GR-63 Core, GR-1089 Core, 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)
<b>Safety</b>	EN60950-1
<b>EMC</b>	EN 300 386-2, FTZ 1TR9
<b>Physical dimensions</b>	H x W x D: 1.7" x 8.8" x 10.4" / 44 x 223.5 x 263 mm

Specifications subject to change without notice

Contact us to find out how our ELASTIC networks can help your business grow at [rbbn.com](http://rbbn.com)

### About Ribbon

Ribbon Communications (Nasdaq: RBBN), which recently merged with ECI Telecom Group, delivers global communications software and network solutions to service providers, enterprises and critical infrastructure sectors. We engage deeply with our customers, helping them modernize their networks for improved competitive positioning and business outcomes in today's smart, always-on and data-hungry world. Our innovative, end-to-end solutions portfolio delivers unparalleled scale, performance, and agility, including core to edge IP solutions, UCaaS/ CPaaS cloud offers, leading-edge software security and analytics tools, as well as packet and optical networking leveraging ECI's Elastic Network technology.

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