



Neptune NPT-1010D

Managed Packet Transport Edge Device

NPT-1010D is an extremely compact packet transport edge device. A member of Ribbon's Neptune (NPT) product line, NPT-1010D is optimized for remote locations with strict environmental and size requirements. NPT-1010D is a hardened DIN-rail switch, supporting Ethernet and MPLS-TP with up to 5 Gbps switching capacity. The Neptune product line streamlines end-to-end metro service delivery by combining carrier-grade service assurance, visibility, and control with packet efficiency and multiservice support. Neptune offers a powerful, flexible, and efficient end-to-end metro solution for high-performance services. It achieves this by convergence of Ethernet (MEF CE2.0 certified), MPLS-TP, OTN, and WDM. Neptune also provides NFV services and SDN applications, which are compulsory in today's challenging metro environment.



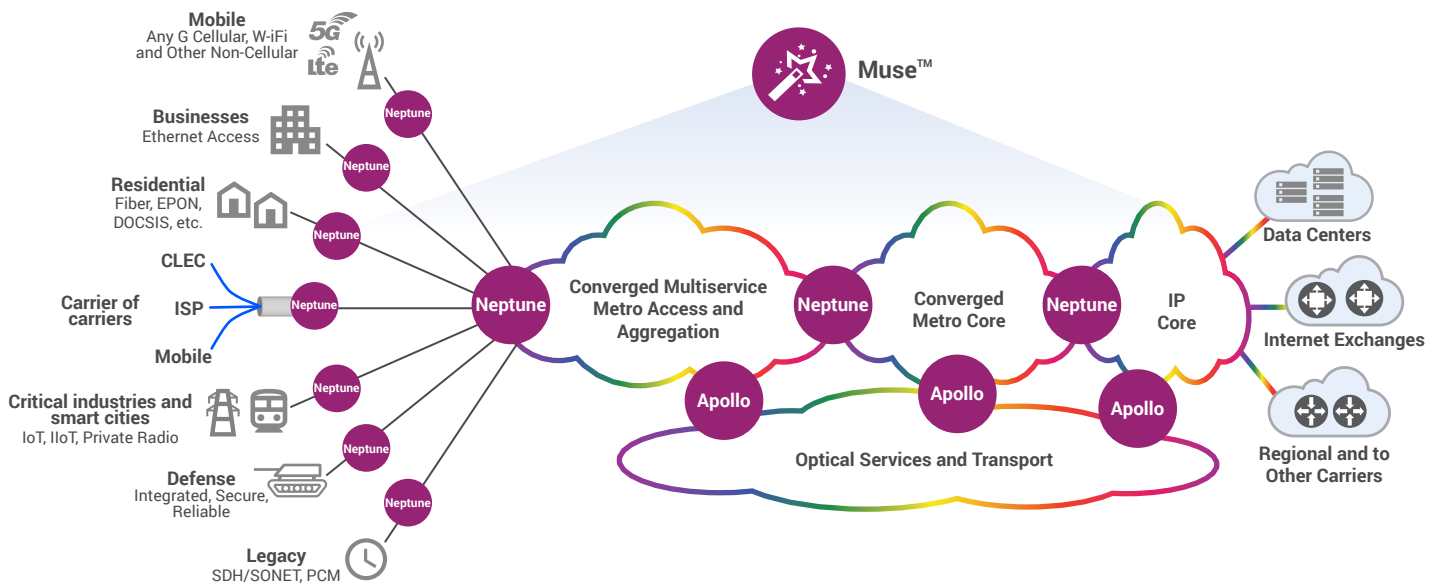
With such a rich and robust feature set, NPT-1010D is well suited for a wide variety of applications and networking scenarios. These include a gateway for mission-critical services, wholesale service delivery, and business VPN connectivity services. As with all of Ribbon's transport products, NPT-1010D is managed by Ribbon's Muse™ software suite.

Elastic Multiservice

Carrier-Grade Service Assurance

Fully-Managed CPE


Elastic Scalability



Technical Specifications

Packet	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: 4 x 10/100/1000BaseT, 4 x 100/1000BaseT/X
WDM	CWDM, DWDM
Timing and Synchronization	SyncE with ESMC, internal stratum 3 clock (holdover state), primary and secondary sources (supports SSM bits), ACR, DCR, loop timing on SAToP, and SNTP
Protection and restoration	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)
OAM	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)
Traffic management	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)
Topologies	Mesh, dual homing , multi-ring, 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 by default
Management	MUSE software suite, MUSE LightSOFT® NMS, EMS-NPT, SNMPv2/v3, LCT, Muse Network and Service Apps
Pluggable SFP support	Electrical, non-colored, colored C/DWDM
Power input	-20VDC to -72VDC or +20VDC to +70VDC
Power dissipation	Typical: 30W
Operating temperature range	-25°C to +70°C (-4°F to 158°F)
Operating RH range	5% to 95%
Environmental standards	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)
Safety	EN60950-1
EMC	EN 300 386
Physical dimensions	H x W x D: 2.3" x 5.04" x 6.0" / 58 x 128 x 151 mm (DIN-rail compliant)

Specifications subject to change without notice

Contact Us  We are here to help. Contact us about our IP Wave solutions.

About Ribbon

Ribbon Communications (Nasdaq: RBBN) delivers communications software, IP and optical networking solutions to service providers, enterprises and critical infrastructure sectors globally. 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 software-centric solutions, cloud-native offers, leading-edge security and analytics tools, along with IP and optical networking solutions for 5G. We maintain a keen focus on our commitments to Environmental, Social and Governance (ESG) matters, offering an annual Sustainability Report to our stakeholders. To learn more about Ribbon, please visit rbbn.com.