ECI THE ELASTIC NETWORK

NEPTUNE NPT-1022

L3 METRO ACCESS TRANSPORT

NPT-1022 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-1022 is 1RU in height, supports up to 64 Gbps capacity, providing a generous fan-out for 10G/GE interfaces, and is optimized for high-capacity CPE and access applications. Neptune streamlines end-to-end metro service delivery by combining carrier-grade service assurance, visibility, and control with packet efficiency and unparalleled multiservice support. Neptune provides a powerful, flexible, and efficient end-to-end metro solution for high-performance L2 and L3 services. It achieves this by converging IP, Elastic MPLS (IP and TP), Ethernet (MEF CE2.0 certified), OTN, WDM, and TDM over CES/CEP. Neptune also supports NFV services and SDN applications, which are compulsory in today's challenging metro environment.

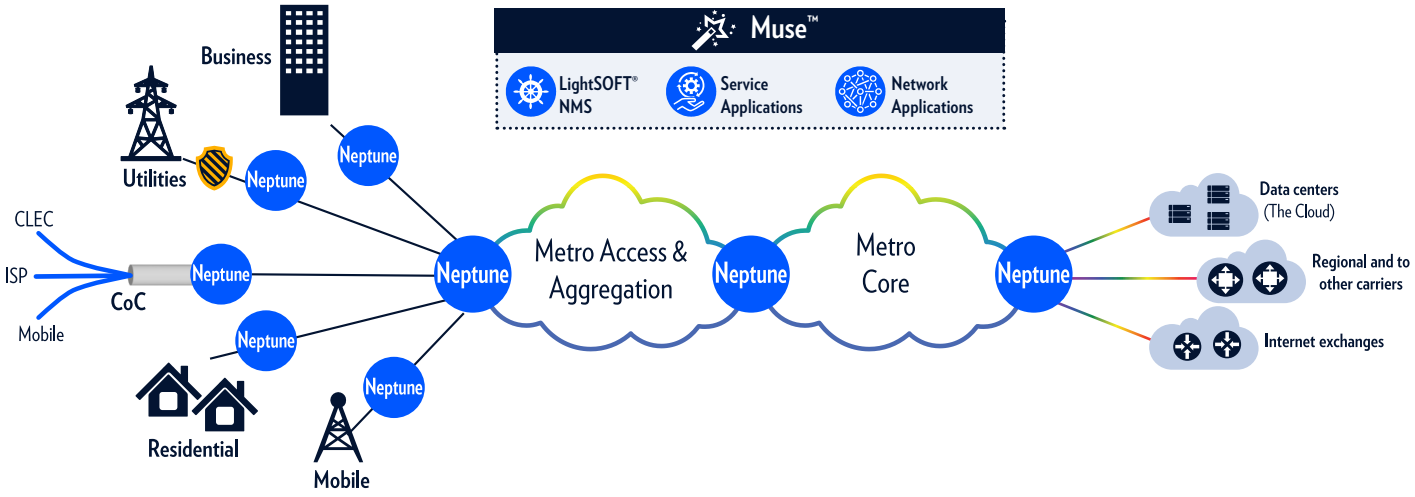
With such a rich and robust feature set, NPT-1022 is well-suited for a wide variety of applications and networking scenarios. These include mobile backhaul, wholesale services, residential multiplay, and Mission Critical and business VPN connectivity services. Like all of ECI's transport products, NPT-1022 is managed by the Muse™ software suite.

Unmatched multiservice
from L2 to L3

Compact and high-capacity
access

Carrier-grade
redundancy and service assurance

Elastic MPLS
both IP and TP



Technical specifications

Packet	**Switch:** 64 Gbps **Services:** 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 **Max. Interfaces (64 Gbps configuration):** 25 x 100/1000 Bas-T, 30 x 100/1000 Base-X, 6 x 10GE
TDM	**Services:** CES (SAToP, CESoPSN and CEP) **Max. Interfaces:** 32 x E1/T1, 4 x STM-1/OC-3, 1 x STM-4/OC-12
WDM	CWDM, DWDM, 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	Power redundancy(AC/DC) for common units, RSTP/MSTP, G.8032 Ethernet Ring Protection (ERP), 1:1 Linear protection, FRR with LFA (Local and Remote) PW Redundancy (PWR), Virtual Router Redundancy Protocol (VRRP), Multisegment-PW, IEEE 802.3ad Ethernet Link, Link Aggregation(LAG) with LACP, Multi Chassis LAG (MC-LAG)
OAM	Ethernet OAM (IEEE 802.1ag and ITU-T Y.1731 PM), IP/MPLS OAM (link BFD, Ping, Trace-route), MPLS-TP OAM G8113.2, RFC5860, Bidirectional Forwarding Detection (BFD), LDI, LSP ping, LSP trace route, RFC 2544 Generator, Y.1564 -Ethenet 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	MACsec, 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	Muse™ software suite (SDN), LightSOFT® NMS, EMS-NPT, SNMPv2/v3, LCT, Muse Network and Service Apps, CLI, NETCONF/YANG, PCEP, BGP-LS
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, 110VAC to 230VAC
Power dissipation	**Typical:** 100W
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, 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
Physical dimensions	H x W x D: 1.7" x 18.3" x 10.4" / 44 x 465 x 263 mm

EXPANSION UNIT

TDM	**Max. service interfaces:** CES: 48 x E1 (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: 1.7" x 17.4" x 9.6" / 44.5 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