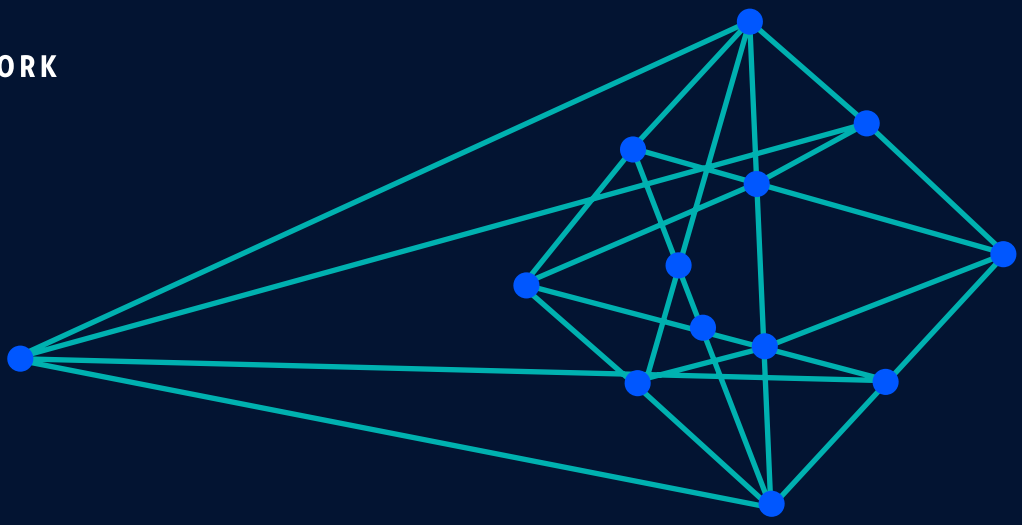
ECI THE ELASTIC NETWORK

NPT-1020
ACCESS PACKET TRANSPORT



The NPT-1020 is an extremely compact hybrid multiservice transport platform. A member of ECI's Neptune (NPT) product line, the Hybrid NPT-1020 is only 1RU in height, supports up to 60 Gbps in capacity, and is optimized for 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 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.

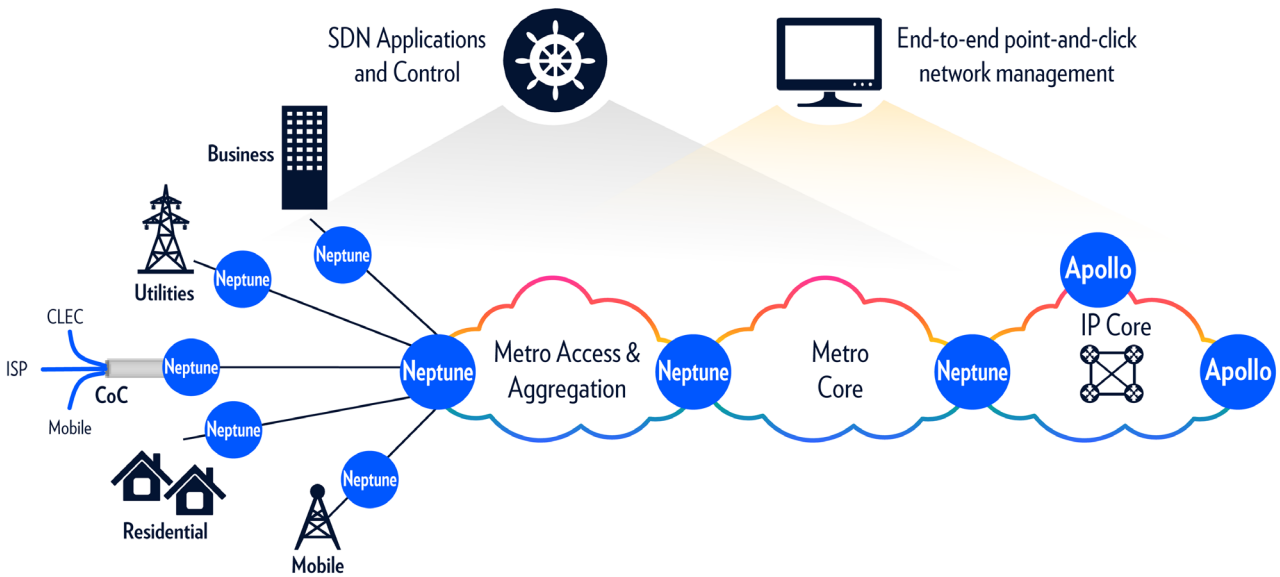
With such a rich and robust feature set, the NPT-1020 is well suited for a wide variety of applications and networking scenarios. These include mobile backhaul, wholesale services, residential multiplay and business VPN connectivity services. Like all of ECI's transport products, NPT-1020 is managed by the unified multilayer LightSOFT® NMS.

Unmatched multiservice
TDM, Ethernet, MPLS-TP, OTN

Compact packet and TDM
metro access

Carrier-grade
service assurance

Independent native processing
both TDM and Ethernet



Technical specifications

Packet	Switch: 60 Gbps (10 GbE based configuration)/10 Gbps (GbE configuration) Services: MEF CE2.0 (E-Line, E-LAN, E-Tree, E-Access) PN- and VPN-based Ethernet and IP, MPLS-TP Rooted multipoint for multicast and IPTV Max. Interfaces: 16 x 10/100/1000 Base-T 8 x 100/1000 Base-X 4 x 10GE 4 x GPON ONU
TDM	Matrix: 2.5 Gbps with 4/3/1 connectivity (100% LO granularity) Services: Native TDM, CES (SAToP, CESoPSN and CEP) Max. Native Interfaces: 3 x STM-4, 4 x STM-1, 3 x DS3/E3, 84 x E1 Max. CES Interfaces: 32 x E1/T1, 4 x STM-1/OC-3, 1 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 power supply units, IO protection (IOP), RSTP/MSTP, G.8032 Ethernet Ring Protection (ERP), MPLS-TP FRR, Dual FRR, 1:1 Linear protection, PW Redundancy (PWR), Multisegment PW, IEEE 802.3ad Ethernet Link Aggregation (LAG) with LACP, Multichassis 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	LightSOFT NMS, EMS-NPT, SNMPv2/v3, LCT, LightAPPS
Power over Ethernet (PoE+)	Up to 30W
Pluggable SFP support	Electrical, colored C/DWDM, tunable, non-colored, Compact SFP (CSFP)SFP+, bidirectional SFPs/SFP+
Power input	-40 VDC to -72 VDC, 110 VAC to 230 VAC
Power dissipation	Typical: 50W
Operating temperature range	-40°C to +70°C (-40°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, 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: 1.7" x 18.3" x 10.4" / 44 x 465 x 263 mm
Expansion unit	
OTN	Services: Ethernet, storage, video, SDH/SONET Max. service interfaces: 48 x 1GE, STM-1/4/OC-3/12/FC-1, 24 x STM-16/OC-48/FC-2, 12 x FC-4, 3 x 10GBE/FC-8/FC-12/STM-64/OC-192, 30/24/12 x SDI/HD-SDI/HD-SDI3G, Max. transport interfaces: 24 x OTU-1, 3 x OTU-2/e
Packet	Max. service Interfaces: 36 x 10/100base-T, 36 x 100 base-X, 12x100/1000 Base-X, 24x10/100/1000 Base-T
TDM	Max. service interfaces: • Native: 189 x E1, 9 x E3/DS3, 12 x STM-1 • 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

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, critical industries, and data center operators. With the advent of 5G, IoT, and smart everything, traffic demands are increasing dramatically, and network operators must make smart choices as they evolve their infrastructure. ECI's Elastic Services Platform leverages our programmable packet and optical networking solutions, along with our service-driven software suite and virtualization capabilities, to provide a robust yet flexible solution for any application. ECI solutions are tailored for the needs of today, yet flexible enough to meet the challenges of tomorrow. For more information, visit us at www.ecitele.com