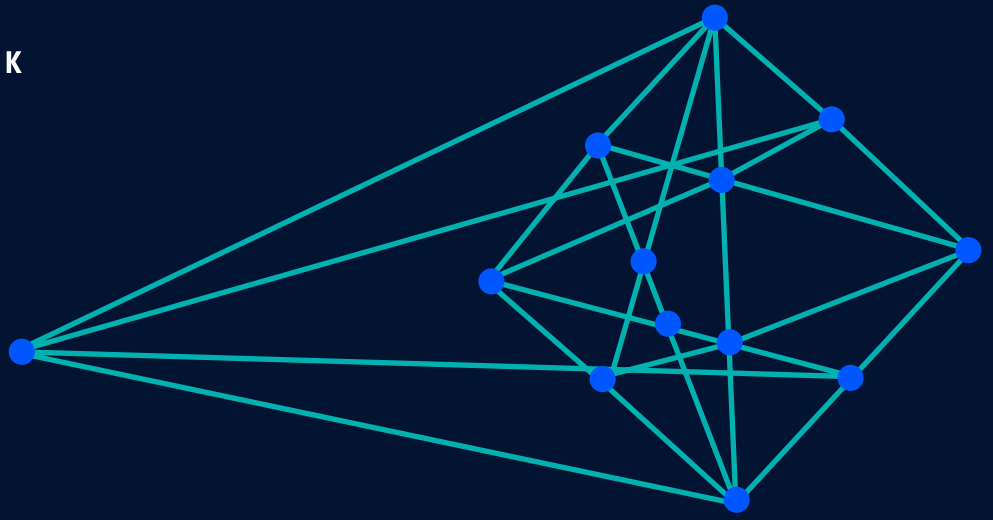# ECI
THE ELASTIC NETWORK

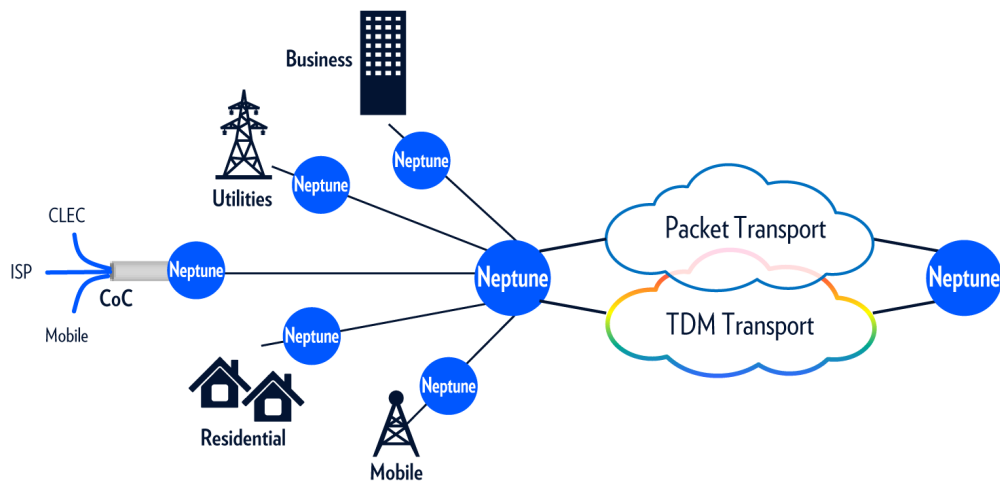# NPT-1600C
COMPACT METRO CORE TRANSPORT

NPT-1600C is a member of ECI's Neptune (NPT) product line. It is a robust multiservice packet-optical aggregation platform that offers unique convergence of carrier Ethernet, MPLS-TP, TDM and all-range WDM OTN on a single topology-neutral platform. For carrier-class packet-optical transport, it combines transport network reliability and ease of management with packet efficiency and advanced WDM functionality. The NPT-1600C supports a full spectrum of services, including Ethernet/MPLS-TP, optics and TDM, This is implemented with unprecedented architectural and protocol support flexibility, when migrating from TDM to packet in high capacity metro sites, and with a low TCO.

NPT-1600C supports up to 400 Gbps of packet switching capacity and 120 Gbps of TDM switching capacity. The Neptune product line streamlines end-to-end metro service delivery, offering a powerful, flexible, and efficient E2E metro solution for high-performance services through convergence of TDM, Ethernet, MPLS, OTN and WDM.

With such a rich and robust feature set, the NPT™-1600C is well-suited for a wide variety of applications and networking scenarios. These include mobile backhaul, utilities, wholesale services, residential multiplay and business VPN connectivity services. Like all of ECI's transport products, NPT-1600C is managed by the unified multilayer LightSOFT® NMS.

Unmatched multiservice	**High-capacity**	**Carrier-grade redundancy**	**Independent native processing**
TDM, Ethernet, MPLS-TP, OTN, WDM	metro core	and service assurance	both TDM and Ethernet

Technical specifications

Packet interfaces	Switch: distributed/centralized 400 Gbps/160 Gbps
	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
	Layer 1 96 x 100/1000 FX
	Layer 2 80 x 100/1000 Base-X 32 x 10GE
TDM	Matrix: 120 Gbps with 4/3/1 connectivity (100% LO granularity) 12 x STM-64/OC-192, 48 x STM-16/OC-48, 192 x STM-4/OC-12, 192 x STM-1/OC-3
WDM	CWDM, DWDM, muxponder , Amplifiers
OTN	Services: Ethernet, storage, video, SDH/SONET Max. Service interfaces: • 96 x 1GE/FC/STM-1/4, OC-3/12, 3 x 10GE, 24/12/8/3/3 x 48 x STM-16/0C-48/FC2 • 24 x 10GbE/STM-64/0c-192/FC10 • 6 x 40GbE/STM-256 Max. Transport interfaces: 48 x OTU-1, 24 x OTU-2/e, 6 x OTU-3/e
Timing and Synchronization	SyncE with ESMC, internal stratum 3 clock (holdover state), primary and secondary sources (supports SSM bits), TDM bits (T3/T4)
Protection and restoration	Hardware redundancy for common units, IO hardware Protection (IOP), RSTP, G.8032 Ethernet Ring Protection (ERP), MPLS-TP FRR, Dual FRR, 1:1 Linear protection, PW Redundancy (PWR), IEEE 802.3ad Ethernet Link Aggregation(LAG)
OAM	Ethernet OAM (IEEE802.3ah, IEEE 802.1ag and ITU-T Y.1731 PM), MPLS-TP OAM (G8113.2)(CC/AIS/RDI), Bidirectional Forwarding Detection (BFD)
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 , multi-ring, ring, star, linear
Security	RADIUS (client authentication), SSH 2, SW integrity checking (SHA-1), SFTP, Access Control List (ACL), public key authentication, port blocked as default
Management	LightSOFT NMS, EMS-MPT, LCT, LightAPPS™
Pluggable SFP /XFP support	Electrical, colored C/DWDM, tunable, noncolored, and bidirectional SFPs/XFP's
Power input	-40 VDC to -72 VDC
Power dissipation	Typical: 1800W
Operating temperature range	-5°C to +55°C (-23°F to 131°F)
Operating RH range	5% to 95%
Environmental standards	ETS 300 019-1-3 Class 3.1E ETS 300 019-2-3 Class 3.2
Safety	EN60950-1
EMC	EN 300 386
Physical dimensions	775 mm (H) x 450 mm (W) x 285 mm (D) 30.51 in. (H) x 17.72 in. (W) x 11.22 in. (D

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**