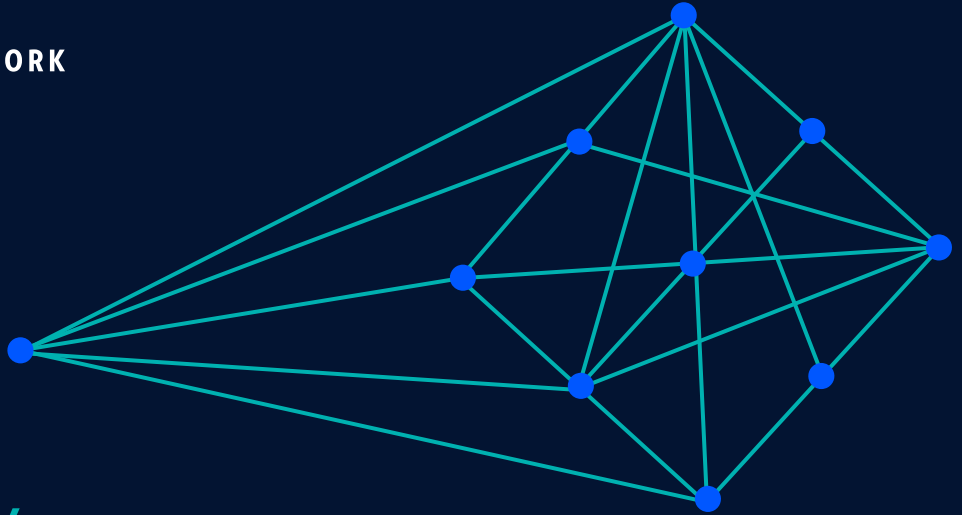


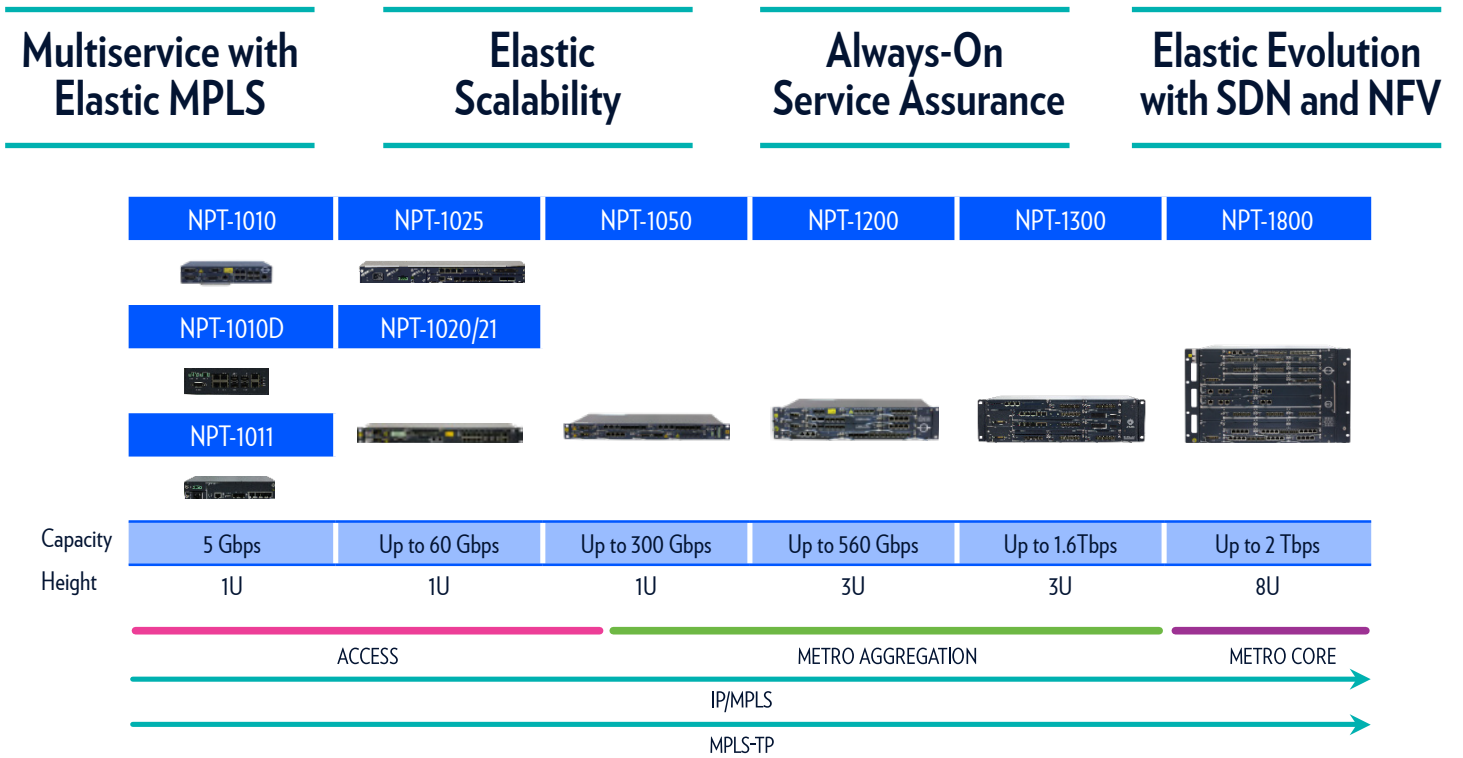
NEPTUNE

METRO PACKET TRANSPORT FAMILY



ELASTIC SCALING FOR THE METRO

The metro network supports an extremely diverse set of services and customer needs, ranging from simple point-to-point private networks to complex multipoint networks, required for 5G backhaul. The Neptune product family, powered by ECI's unique Elastic MPLS, supports these diverse service needs cost efficiently, with the right-size platform for growth and in-service expansion options. As customers evolve, they demand always-on services. Neptune supports this with resilient hardware and advanced operation software. It also supports more flexible and dynamic services, with embedded NFVi hardware and SDN, for more robust service delivery.



Technical specifications

Multiservice	ELASTIC MPLS (Packet) <ul style="list-style-type: none"> • Services: MEF CE2.0 (E-Line, E-LAN, E-Tree, E-Access), Ethernet, L2/L3 VPNs, MPLS-TP, IP/MPLS, Segment Routing, multicast, IPoDWDM • Service Interfaces: FE, 1GE, 10GE, 100GE
	OTN <ul style="list-style-type: none"> • Capacity: 3 x 40G • Services: Ethernet, Storage, Video, SDH/ SONET • Service interfaces: 10GE, FC-1/2/4/8/10, SDI, HD-SDI, DVB-ASI, STM-16/64, OC-12/48 • Transport interfaces: OTU-1, OTU-2, OUT-2e, OTU-4
	WDM <ul style="list-style-type: none"> • CWDM, DWDM, muxponder, coherent 100GBE, amplifiers, optical filters
	TDM <ul style="list-style-type: none"> • Services: Native TDM, CES (SAToP, CESoP and CEP) • Service interfaces: n x 64Kbps (FXO, FXS, 2/4W E&M, V24, V35, V36, V11, RS422, RS449, C37.94, OMNI, G.703 64K), E1/T1, E3/DS3, STM-1/OC-3, STM-4/OC-12, STM-16/64
	Flexibility <ul style="list-style-type: none"> • Switching platforms: Packet +TDM, Packet only • Topologies: Mesh, multi-ring, ring, star, linear, dual homing • Protocol conversion: IP/MPLS and MPLS-TP stitching, pseudo-wire headend termination, MS-PW
Elastic scalability	In-service scalability <ul style="list-style-type: none"> • Elastic Modularity: Expansion unit provides 3 slots for in-service capacity and technology expansion • Switching fabric expansion: matrix card reassign with higher switch matrix capacity
Service assurance: every time, everywhere	Protection and restoration HW redundancy for common units, IO Hardware protection (IOP), G.8032 Ethernet Ring Protection (ERP), MPLS-TP FRR, Dual FRR, 1:1 Linear protection, PW Redundancy, FRR with LFA (local and remote), Virtual Router Redundancy Protocol (VRRP), MS-PW, IEEE 802.3ad Ethernet Link
	Timing and synchronization SyncE, 1588v2 (G.8265.1, G8275.1), External timing 1PPS and TOD, Internal Stratum 3 clock (holdover state), Primary and secondary sources (supports SSM bits), ACR, DCR, loop timing on SAToP, BITs (2MHz/2Mbit)
	Operations, Administration and Maintenance (OAM) Ethernet OAM (IEEE 802.1ag, IEEE 802.3ah and ITU-T Y.1731 PM), IP/MPLS OAM (Ping, Trace-route), MPLS-TP OAM 8113.1.2, (LSP Ping, LSP Trace-route) Bidirectional Forwarding Detection (BFD), LDI, RFC 2544 generator, Y.1564
Evolution to SDN and NFV	Traditional networks <ul style="list-style-type: none"> • Interfaces: SNMPv2/v3, CLI • Management Systems: LightSOFT® NMS, EMS-NPT, Local Craft Terminal
	SDN <ul style="list-style-type: none"> • SDN Interfaces: OpenFlow, NETCONF/YANG, PCEP, BCP-LS • Muse: For SDN orchestration and control
	NFV <ul style="list-style-type: none"> • Mercury™ NFVi: The Mercury NFVi can be embedded on Neptune providing the ability to support VNFs from the Mercury VNF library and multi-access edge computing (MEC)

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