ECI THE ELASTIC NETWORK

APOLLO OPT9904X

EXTENDING OTN/PACKET SWITCHING TO THE NETWORK EDGE
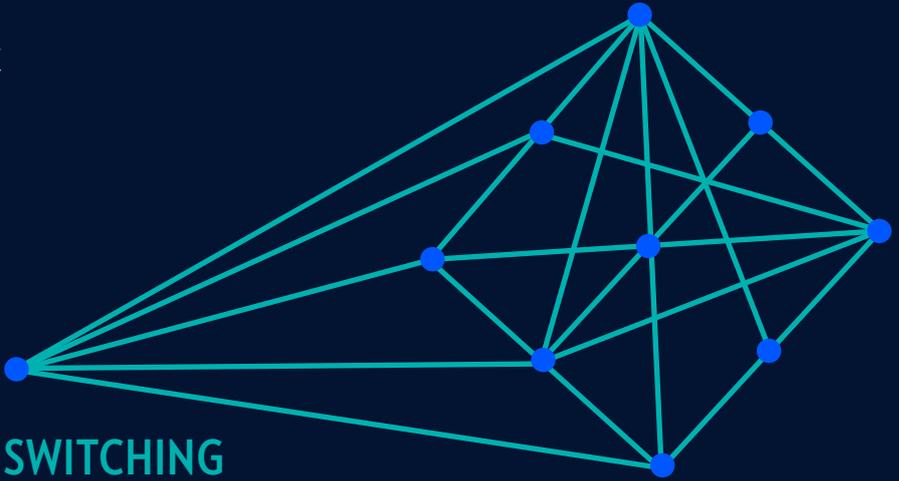
Apollo OPT9904X extends the benefits of OTN switching into the aggregation and access portions of your network. Working seamlessly with Apollo core network OTN switches, OPT9904X maximizes E2E flexibility for wavelength grooming. It also enables SDN services like bandwidth-on-demand, as well as automated service restoration to guarantee high availability SLAs.

OPT9904X is based on a unique "fabric-less" design that enables smooth switching capacity expansion in 200G increments. This can total up to 800G per shelf, without having to invest in separate switching fabrics. Moreover, OPT9904X integrates packet services, generating savings by aggregating L2 traffic and reducing the number of costly router ports. OPT9904X is a member of the Apollo family of optical transport and switching platforms, delivering end-to-end transparent optical networking solutions for the broadest range of clients at the lowest cost per bit.

Most compact	**Enables E2E**	**Integrated**	**High accuracy**
ODU-XC in the market	OTN switching solution	packet services	mobile synchronization
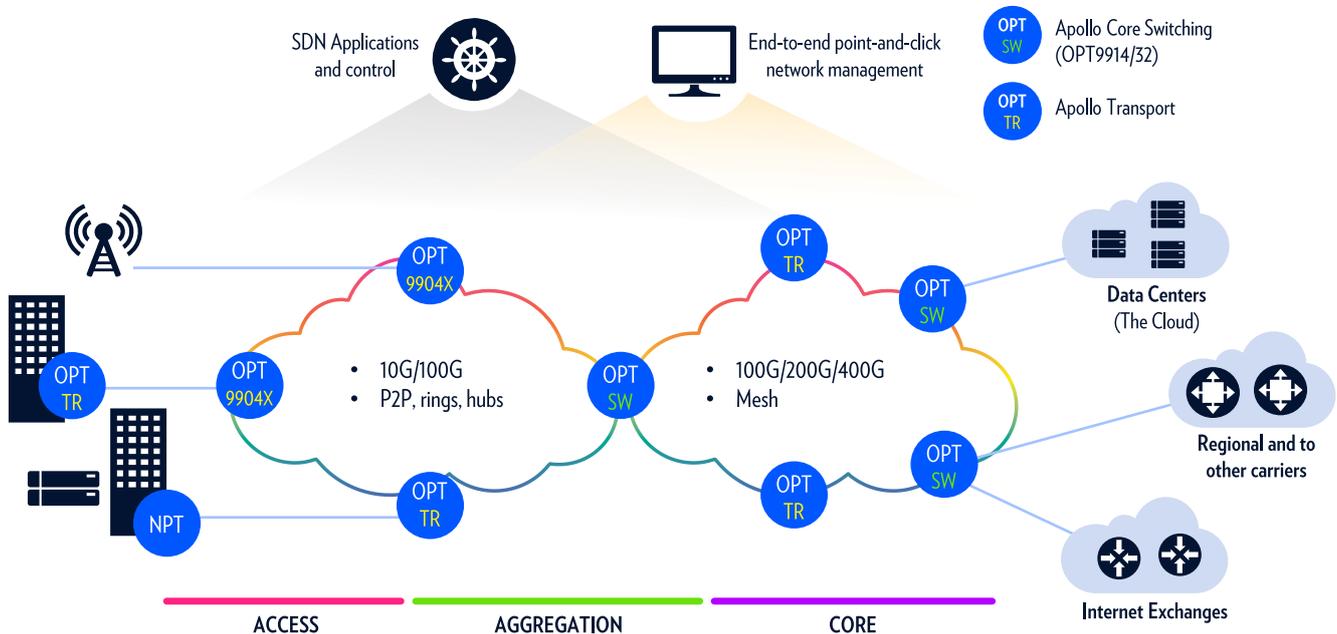
Technical specifications

Topologies	Mesh, hub, ring
Spectrum	C-band Fixed spectrum - 96 channels at 50 GHz, 48 channels at 100 GHz Flexible spectrum at 12.5GHz resolution, with 37.5 GHz bandwidth for 100 Gbps network interface rate
Capacity	**Shelf**: 4 slots for cards **Card**: 200G single slot, 400G ready **Switching**: 0.8T, 2T ready. Universal fabric for OTN switching (ODUk cross-connect 0, 1, 2, 2e, 4, Flex) and packet switching (L2 and MPLS-TP)
MIO-200 single-slot 200G card	**1 x 100G (CFP):** • OTU4 metro/regional pluggable CFP coherent transceiver with 15% SD-FEC or • Direct detection 10x10 metro transceiver • 100GbE client **12 x 10G (SFP/SFP+) supporting:** • Ethernet (1GbE, 10GbE) • SDH/SONET (STM-1, 4, 16, 64/OC-3, 12, 48, 192) • SAN (FC-1, 2, 4, 8, 10, 16) • OTU (2, 2e, 4) • Metro OTDR SFP
Switching fabric	No separate fabric card required. Switching is integrated in MIO-200 backplane for a unique pay-as-you-grow architecture.
Optical card support	Amplifiers, OMSP, OLP
Synchronization	SynchE and 1588V2 ready
Restoration	Wavelength Switched Optical Network (WSON)- wavelength level Automatic Switched Optical Network (ASON) – service level ODU SNC-N protection
HW redundancy	Power supply and fan redundancy modules High availability RCP main shelf controller
Dimensions	ANSI 19" rack: 221 mm height x 253 mm depth Front access to all cards
Power input	-40.5 VDC to -75 VDC
Environmental	Operating temperature: -5°C to +55°C Relative humidity: 5% to 90% (non-condensing)
SDN	**Muse**™ applications (e.g. Bandwidth on Demand, Scheduled Services)
Network management	**LightSOFT**® end-to-end, point-and-click network management
Performance monitoring	**LightPULSE**™ integrated real-time OSNR and other parameters

Specifications subject to change without notice

Contact us to find out how Apollo can build powerful and versatile optical networks

ECI

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**