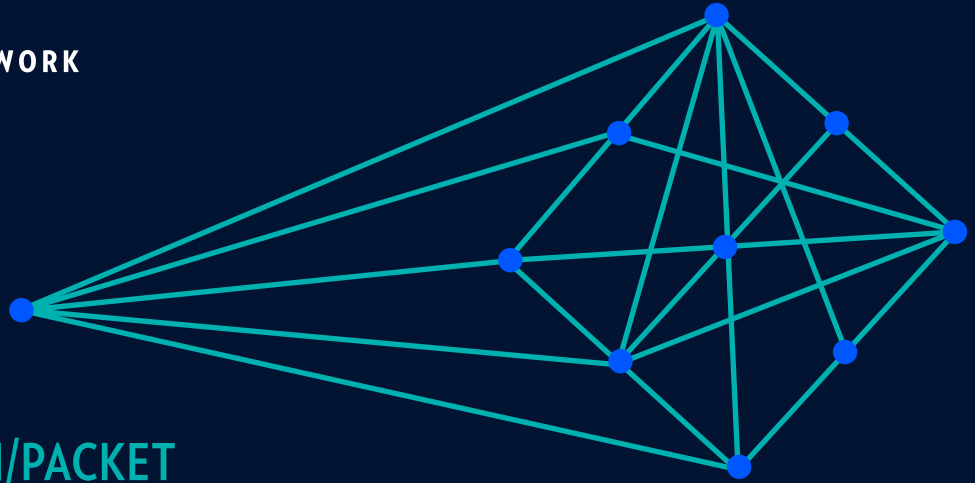


APOLLO OPT9914

HIGH CAPACITY OTN/PACKET SWITCHING



The Apollo OPT9914 switching and grooming platform provides future-proof capability to address changing mixes of Layer 1 transport and Layer 2 packet switching traffic, while ensuring a maximum fill of premium 100G, 200G and 400G network interfaces. Its ample 5.6T capacity in a space efficient half-height rack is designed for medium-scale applications.

Using either centralized SDN or peer GMPLS signaling, OPT9914 provides the highest level of network availability through ASON restoration. Like all members of the Apollo family, OPT9914 can be used to construct and customize any type of access-through-core and data-center-connectivity optical transport application.

The Apollo family of optical transport and switching platforms enables service providers to deploy end-to-end transparent optical networking solutions for the broadest range of clients at the lowest cost per bit. Apollo accomplishes this while supporting packet services, high efficiency operations, and SDN applications simultaneously

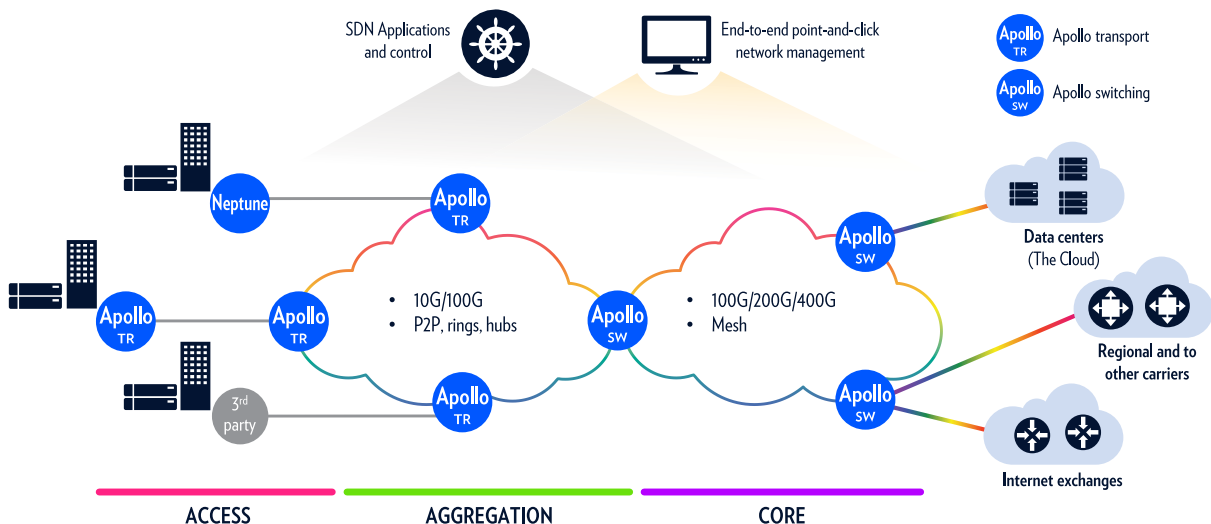


Lowest cost per bit
transparent switching
and transport

Integrated packet services
MEF Carrier Ethernet

High-efficiency operations
E2E visibility and control

Green technology
dense low-power blades



Technical specifications

Topologies	Mesh, hub, ring
Spectrum	C-band Fixed spectrum - 96 channels at 50GHz, 48 channels at 100GHz Flexible spectrum at 12.5GHz resolution, with 37.5GHz bandwidth for 100/200Gbps network interface rates
Capacity	Shelf: 14 slots for blades interchangeable across Apollo 99XX platforms Card: 400G single slot density Switching: 5.6T, universal fabric for OTN switching (ODUk cross-connect 0, 1, 2, 2e, 3, 4, Flex) and packet switching (L2 and MPLS-TP)
Hybrid service cards: mix of Layer 1 and Layer 2 services	HIO500: single slot, 400G card with configurable rates and modulation, 25% SD-FEC, Pluggable D-CFP2: <ul style="list-style-type: none"> • 400G: 2 x 200G PM-16QAM, with 30,000ps/nm CD tolerance, 20ps PMD tolerance • 200G: 2 x 100G PM-QPSK, with 50,000ps/nm CD tolerance, 30ps PMD tolerance, for ultra-long haul >4000km HIO100_2: 2 x 100G on a single slot, supporting: <ul style="list-style-type: none"> • OTU4 metro/regional pluggable CFP coherent transceiver with 15% SD-FEC • OTU4 ZR/ER direct detection and coherent CFP – metro and LH versions • 100GbE – LR4, SR10, ER4 HIO10_20: 20 x 10G (SFP+), 2 x 40GbE (QSFP - SR4,LR4), on a single card, supporting: <ul style="list-style-type: none"> • 10GbE, OTU2/2e, STM-64, OC192, FC1200, FC8, FC10 TIOMR_32 (non-Hybrid): 32 multi-rate SFP ports <ul style="list-style-type: none"> • GbE, STM-1/4/16, OC3/12/48, FC1/2/4
Restoration	Wavelength Switched Optical Network (WSON)- wavelength level Automatic Switched Optical Network (ASON) – service level ODU SNC-N protection, LAG
HW redundancy	3+1 switching fabric redundancy Power supply and fan redundancy modules High availability RCP main shelf controller
Dimensions	ANSI 19" rack, ETSI 600 x 300 mm, 1000mm height Front access to all cards
Power input	-40.5 VDC to -75 VDC
Environmental	Operating temperature: -5°C to +45°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



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