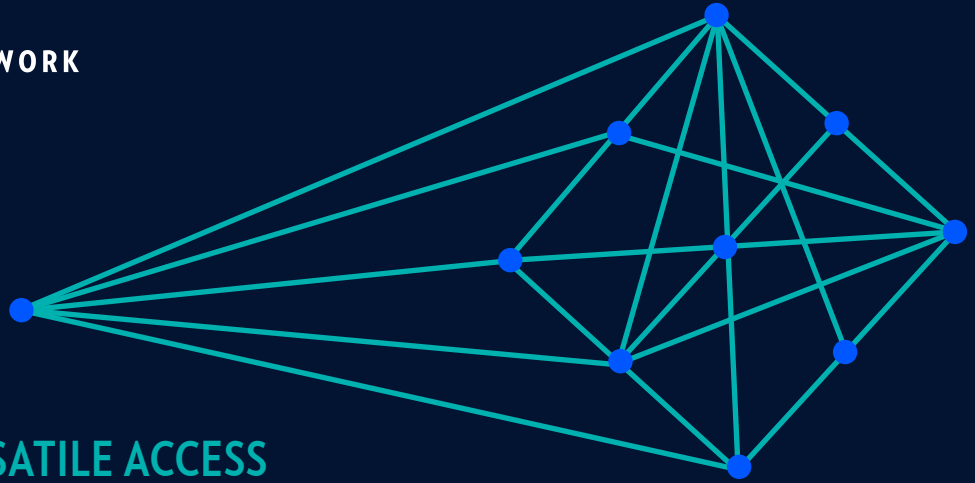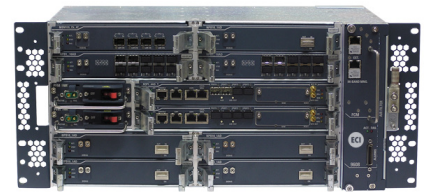# APOLLO OPT9608

POWERFUL AND VERSATILE ACCESS TO CORE OPTICAL TRANSPORT

The Apollo family of optical transport and switching platforms enables service providers to deploy end-to-end transparent optical networking solutions for a broad range of clients at the lowest cost per bit. Moreover, Apollo does this while simultaneously supporting packet services, high efficiency operations, high availability, low-latency Layer 1 encryption, and SDN applications. The OPT9608 is Apollo's powerful and versatile mid-range transport platform with a total client and network capacity of 6.4T. The OPT9608's arsenal of transponders and muxponders includes 100G, 200G, and 400G network interfaces that are software programmable for varied client mixes. It supports up to 20 degrees of all-optical networking using flexible grid CDC ROADMs. Along with other members of the Apollo family, the OPT9608 can be used to construct and customize any type of access-through-core and data-center-connectivity optical transport application.
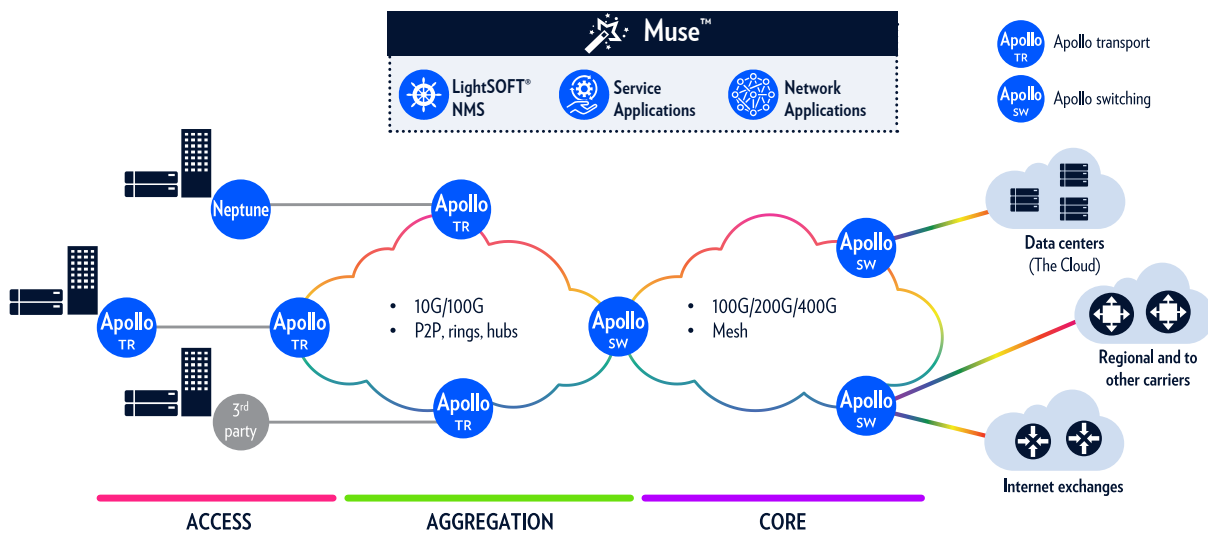
Lowest cost per bit	**Integrated packet services**	**High-efficiency operation**	**Green technology**
transparent transport	MEF Carrier Ethernet	E2E visibility and control	dense low-power blades

Technical specifications

Topologies	Mesh, hub, ring, linear, point-to-point
Spectrum	Extended C-band Fixed grid: 50GHz/96ch and 100GHz/48ch Flexible spectrum at 12.5GHz resolution, with 37.5GHz bandwidth for all coherent network interface rates
Capacity	Shelf: 8 slots for blades, interchangeable across Apollo family transport platforms 3.2T client capacity (6.4T total capacity)
Service (client) interfaces	Ethernet (1GbE, 10GbE, 40GbE, 100GbE) SDH/SONET (STM-1, 4, 16, 64/OC-3, 12, 48, 192) SAN (FC-1, 2, 4, 8, 10, 16) Video (DVB-ASI, SDI 270, HD-SDI 1.5G/3G) OTU (1, 2, 2e, 3, 4)
Layer 2 interfaces	MEF Carrier Ethernet 2.0 virtual LAN services: E-Line, E-LAN, E-Tree, and E-Access Statistical multiplexing transport aggregation Connection-oriented transport using integrated 60G Q-in-Q or MPLS-TP switch
Encryption	AES256-GCM with Diffie-Hellman group 5 key exchange, FIBS 140-2, level 2
Network (DWDM) interfaces	OTU1 (2.5 Gbps) OTUC2 (200 Gbps) OTU2/2e (10 Gbps) OTUC4 (400 Gbps) super-channel OTU3e (40 Gbps) OTU4 (100 Gbps)
Optical add/drop multiplexers	2-, 4-, 9-, and 20-degree ROADMs (fixed grid and flexible grid) with automatic power equalization and Colorless, Directionless, and Contentionless (CDC) wavelength routing Fixed OADM 100% add/drop capacity
Amplification	EDFA, Raman, Hybrid EDFA/Raman, with embedded optical leveling and control Output power: 16 dBm to 26 dBm Gain: up to 40 dB with/without 10 dB midstage
Protection	OCH 1+1, OLP, OMSP, Y Protection, DRI/DNI
Restoration	Wavelength Switched Optical Network (WSON) – wavelength level Automatic Switched Optical Network (ASON) – service level 1+1, 1+1 forever, preplanned/dynamic protection
HW redundancy	All common units/cards: power supply, controllers, fan units
Dimensions	19" width, 221 mm height, 253 mm depth, 8 service slots
Power input	-40.5 VDC to -75 VDC
Environmental	Operating temperature: -5C to +55C 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**

ECI ®