Apollo 9408

Next Generation Compact Modular Optical Transport

Apollo 9408 is the industry's highest capacity and highest density platform for 100GbE, 400GbE, and future 800GbE transport. It is designed to provide network operators with the lowest cost per bit for long haul and high traffic density metro applications.

Apollo 9408 achieves this by exploiting next generation Jannu 5nm 140Gbaud transceiver technology that leapfrogs the performance of current generation 7nm 95Gbaud based solutions. It distinctively features a combination of continuous baud rate and continuous modulation controls that maximize the line rate, from 400G to 1200G, for any distance and channel width right to the edge of the Shannon Limit. This enables Apollo 9408 to meet the most demanding needs of network operators by uniquely providing 1200G wavelengths for short haul applications, 800G wavelengths that cover the entire extended-metro space with ease, and 400G wavelengths for ultra-long haul.

Apollo 9408 also delivers ultra-dense 400G metro networking solutions using pay-as-you-grow QSFP-DD 0dBM+ pluggables, which are OpenROADM compliant for disaggregated transmission applications.
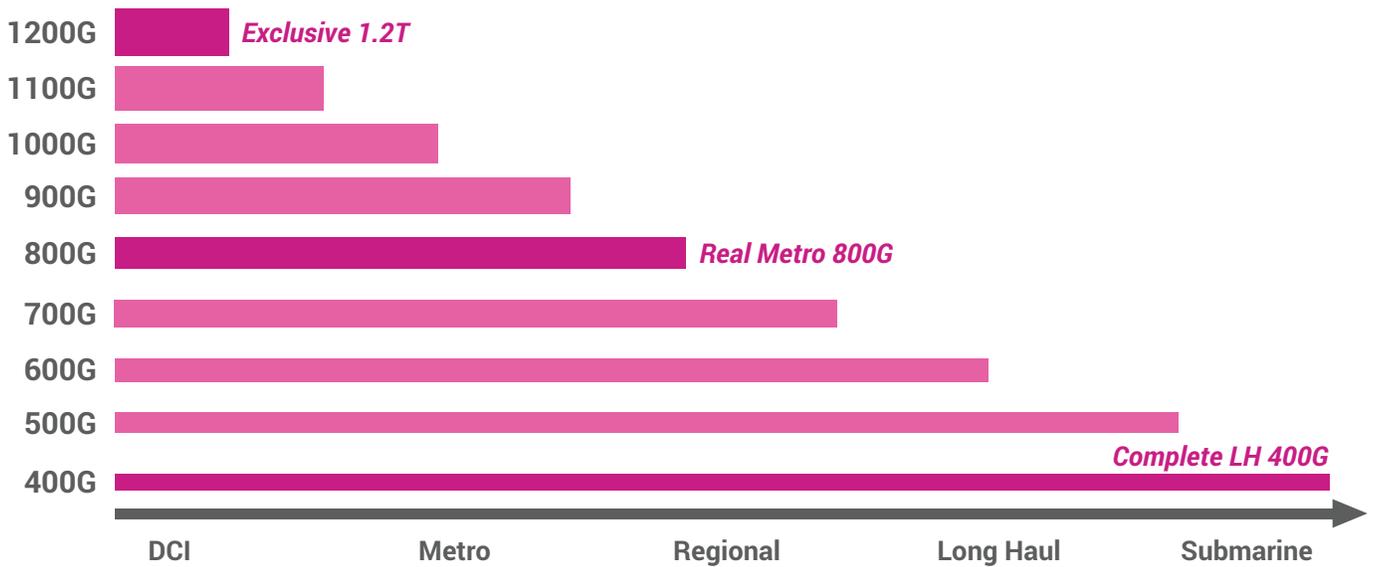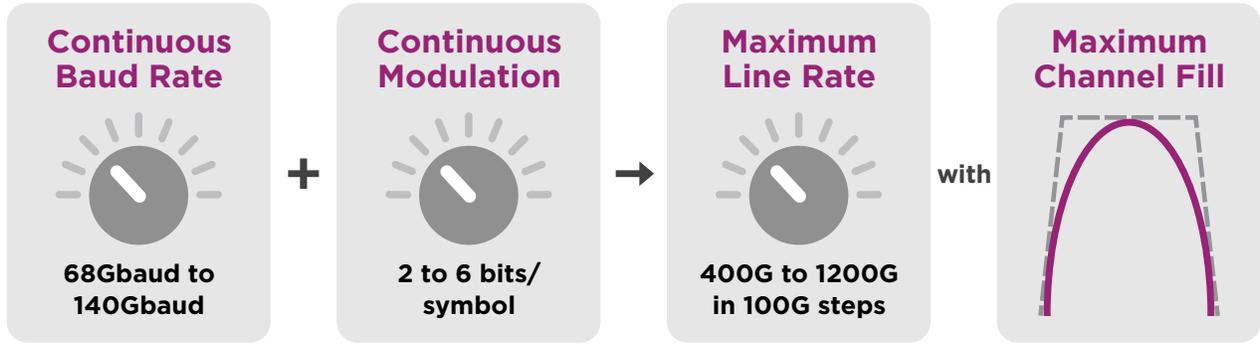
Not only does Apollo 9408 deliver outstanding performance, it incorporates many features to facilitate deployment and operability. It is packaged in a compact 2RU chassis with front to back cooling for data center residency. MPO fibers enable installation simplicity, and all common modules are field replaceable. Auto discovery and gNMI telemetry support advanced operations. Apollo 9408 can be deployed in a disaggregated fashion with control via an industry standard APIs, or in conjunction with other Ribbon networking platforms with control via Muse SDN Orchestrator.

Programmable line rates up to 1200G	**Industry highest-density** up to 19.2T in 2RU	**Disaggregated** operation over third-party OLS	**Intelligent** for advanced operations

Continuous Baud Rate		Continuous Modulation		Maximum Line Rate		Maximum Channel Fill
68Gbaud to 140Gbaud	+	2 to 6 bits/ symbol	→	400G to 1200G in 100G steps	with	

1200G — *Exclusive 1.2T*

1100G

1000G

900G

800G — *Real Metro 800G*

700G

600G

500G

400G — *Complete LH 400G*

DCI   Metro   Regional   Long Haul   Submarine

Representative Apollo 9408 line performance with 5nm-140Gbaud powered transceiver

By combining next generation 5nm 140Gbaud transceiver technology with continuous baud rate and continuous modulation controls, Apollo 9408 maximizes the line rate, from 400G to 1200G, for any distance and channel width right to the edge of the Shannon Limit.

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Technical Specifications

Spectrum	C-band, L-band; Flexible grid with 12.5GHz granularity, fixed grid 50GHz/100GHz
Capacity	8 single slot or 4 double slot blades, mixing allowed
MPJ1200_2 flexible growth high performance blade	• Double slot • Two independently pluggable Jannu-powered CIM8 transceivers • Line rate to 400-1200G per transceiver at 140Gbaud • Two QSFP-DD clients each supporting 1x400GbE or 4x100GbE; gray or ZR+ • Two QSFP-DD800 each supporting 2x400GbE or 8x100GbE; gray or ZR+ • Hardware ready for 800GbE
MIC1200_2 high density high performance blade	• Single slot • Two independent integrated Jannu-powered transceivers • Line rate to 400-1200G per transceiver at 140Gbaud • Two QSFP-DD clients each supporting 1x400GbE or 4x100GbE; gray or ZR+ • Two QSFP-DD800 each supporting 2x400GbE or 8x100GbE; gray or ZR+ • Hardware ready for 800GbE
MPQ_8 high density flexible growth 400G blade	• Double slot • Eight independent lines using QSFP-DD-DCO 0dBM+ pluggable transceivers • 100G to 400G per line • OpenROADM compliant • 8 x QSFP-DD clients each supporting 1x400GbE or 4x100GbE; gray or ZR+
Encryption	Optional L1 optical encryption on all line interfaces
Physical and Temperature	• 600x440x88.4 mm • Front to back airflow • 0°C - 45°C • All common modules field replaceable
Power	Max 3200W 90VAC-240VAC redundant PSU Max 3300W 40.5VDC-72VDC redundant PSU
Operations	• SNMP, ZTP, CLI • Auto discovery • gNMI telemetry • Integrated performance monitoring
Security	• Syslog, Syslog-ng • RADIUS, TACACS+, Kerberos • TLS 1.3, SSH, SNMPv3
Controller	6 ports (1 console, 4 RJ45, 1 USB-C)
Management	• Muse SDN Orchestrator • OpenConfig and OpenROADM APIs

Specifications subject to change without notice

Contact Us Contact us to learn more about Ribbon solutions.

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