



G10 AND G10X MODULES

For the 4200 Family

Features and Benefits

- Provides Layer 2 aggregation over dense copper 10/100/1000, Fiber FE, GbE, and 10GbE interfaces
- Offers flexible Layer 2/3 processing
- Reduces capital expenditures and increases network efficiency
- Allows different Ethernet speeds to communicate across the network
- Enhances service flexibility, increases variety of offerings, and extends reach
- Offers flexibility to meet changing IEEE 802® standards

The G10 and G10X modules introduce Ethernet switching functionality to the transport capabilities of the 4200 creating a fully integrated Layer 0/1/2 device.

With this approach, network operators can reduce the cost and improve the efficiency of both Layer 2 switched networks and Layer 1 transport networks to support a variety of applications including:

- Business services
- Triple play
- Enterprise WAN and storage
- Wireless backhaul
- Ethernet infrastructure

The G10 and G10X modules highlight Ciena's commitment to facilitating connection-oriented Ethernet, enhancing the successful 4200 by adding packet functionality to one of the most advanced and flexible optical transport platforms on the market today.

Layer 0/1/2 integration allows the network operator to right-size transport bandwidth and permit a limitless number of Ethernet clients on a single wavelength ring, so the transport network design can be determined by the amount of Ethernet service rather than the number of clients.

The function of the G10 and G10X is based on the Metro Ethernet Forum (MEF) Ethernet Virtual Circuit (EVC) standard, and supports both Ethernet Virtual Private Line (EVPL) and EPL circuits with or without packet modification through the tunnel, and with or without packet modification through the tunnel, and guaranteed Service Level Agreement (SLA) conformance. Switching occurs on a Virtual Local Area Network (VLAN) and supports Q-in-Q, with service prioritization on VLAN p-bit or DiffServ Code Point (DSCP).

Both the G10 and G10X are true Layer 2 switches, that help reduce the number of network elements and interfaces by offloading Ethernet traffic from a separate Ethernet switch to a single 4200. Providers using the G10 and G10X can extend Ethernet service reach, offer greater service variety, and increase network flexibility by enabling any-speed to any-speed connectivity.