



5305 SERVICE AGGREGATION SWITCH

Features and Benefits

- Features advanced Ethernet and MPLS to support demanding business, mobile backhaul, transport, and residential applications including L2VPN service delivery and aggregation, 3G/4G wireless backhaul, FTTx and IP DSLAM Aggregation and L2 backhaul of L3VPNs
- Delivers optimal density and service flexibility with a compact modular chassis, supporting incremental expansion of service and bandwidth capacity with linear CAPEX outlay
- Supports tens of thousands of services on a single system with robust scalability of up to 30,000+ VLANs and two million MAC addresses per chassis
- Delivers high reliability, five-9s availability, and 50 ms protection switching resiliency using state-of-the-art hardware and software design coupled with advanced control plane and Ethernet OAM capabilities
- Provides broad service stratification and robust bandwidth allocation for guaranteed SLAs via MEF-14-compliant hierarchical QoS capabilities
- Supports interworking between Q-in-Q VLANs, MPLS Virtual Circuits, VPLS/H-VPLS L2VPNs, and PBB-TE connections with a sophisticated virtual switching architecture for complete service flexibility and optimal utilization of network resources
- Enables operational efficiency and high-velocity service rollout with a field-proven service-aware operating system and comprehensive Carrier Ethernet management capabilities

The 5305 Ethernet/MPLS service aggregation switch is purpose-built for Carrier Ethernet to deliver cost-effective capacity, scalability, and resiliency. With this switch, service providers can keep pace with the constantly increasing demand for bandwidth and next-generation services that support business, mobile backhaul, transport, and residential applications in metro networks.

The 5305 is a modular, chassis-based system optimized for metro-edge deployments in a wide variety of network topologies, including fiber and microwave rings, point-to-point fiber, microwave mesh, and fiber or copper to the subscriber. The switch supports high-density Gigabit Ethernet (GbE) connectivity to the subscriber edge and high-performance 10GbE uplinks to the metro core, with fully redundant commons and a distributed switch fabric for five-9s reliability and service continuity.

The 5305 is based on Ciena's field-proven True Carrier Ethernet® technology, deployed by dozens of network operators in tens of thousands of points of presence, central offices, businesses, office parks, cell sites, remote terminals, and residences. It combines the low cost and high capacity of Ethernet with the reliability, management, and service quality usually associated with SONET/SDH networking systems. The 5305 software is based on an advanced service-aware operating system—used in all Ciena service delivery and aggregation switches—which provides consistent system and service attributes and a common operator interface, provisioning, and management capabilities. These features leverage customer investment in training and operational procedures, provide significant operational cost savings, enhance service creation velocity for faster time-to-revenue, and deliver synergy with Ciena's best-in-class portfolio of right-sized service aggregation and service delivery Carrier Ethernet systems.

The 5305 incorporates the latest innovations in Ethernet switching technology and control plane protocols and utilizes high-performance programmable processors to deliver new features and functionality through simplified software upgrades with minimal disruption