

DATA SHEET

3960

Service Delivery Switch



Ciena's 3960 Service Delivery Switch is a next-generation Ethernet access system that cost-effectively delivers 10 Gigabit Ethernet (GbE) and 1 GbE business and transport Ethernet services via fiber or copper connections.

The 3960 features a high-capacity switching fabric, four 10GbE ports and eight 1GbE ports in a compact single rack unit form factor (1RU) with redundant power supply modules. This efficient packaging design enables the 3960 to be deployed in a wide variety of physical environments and service-delivery topologies supporting 10G demarcation, enterprise customers, wireless backhaul providers, and 10G/1G applications.

The 3960 is based on Ciena's field-proven packet networking technology, deployed by dozens of network operators in tens of thousands of homes and businesses. The switch combines the low cost and high capacity of Ethernet with the reliability, management, and service quality usually associated with SONET/SDH networking systems. The 3960 software architecture is based on the common service-aware operating system used in all Ciena service delivery and aggregation switches to provide operational efficiency and consistent system and service attributes.

The core of the 3960 is a highperformance switching platform that incorporates the latest innovations in Ethernet switching technology, control plane protocols, and encapsulation techniques, and Carrier Ethernet Operations, Administration, and Maintenance (OAM) mechanisms. The result of this combination is a state-of-the-art design that enables the 3960 to deliver the sophisticated Quality of Service (QoS) capabilities, superior Virtual Local Area Network (VLAN) and virtual switching functions, and robust management and performance monitoring features required to support carrier-grade Layer 2 Virtual Private Networks (L2 VPNs), mission-critical data, high-speed Internet, and high-quality IPTV and VoIP services.

Features and Benefits

- Uses high-capacity switch fabric to enable 10G demarcation and 10G/1G service delivery applications
- Supports four 10GbE XFP ports—two configurable as NNI or UNI and two dedicated as UNI
- Supports eight 100M/GbE subscriber UNI ports with Small Form-factor Pluggable (SFP) and RJ-45 connectors
- Supports diverse network topologies, including fiber rings, point-to-point fiber, dual-homed network uplinks, 10GbE uplinks and both 10GbE and 1GbE subscriber interfaces
- Supports operational efficiency and advanced Ethernet features for highend business and transport services with modular serviceaware operating system, including PBB-TE, Ethernet Virtual Private Line/LAN/Tree, and MPLS/H-VPLS
- Provides advanced Ethernet switching, control, and VLAN features with comprehensive QoS and Ethernet OAM, for guaranteed SLAs
- Features a state-of-the-art hardware design and fieldproven, modular serviceaware operating system for reliability and resiliency
- Offers compact (1RU) ETSI form factor and dual AC or DC power supply modules for enhanced reliability