

## DATA SHEET

# 3940

## Service Delivery Switch



Ciena's 3940 Service Delivery Switch is a next-generation Ethernet access system that cost-effectively delivers sophisticated business, transport, and residential Ethernet services via fiber or copper connections.

The 3940 features a high-capacity switching fabric with 24 Gigabit Ethernet (GbE) ports in a compact single rack unit (1RU) form factor, allowing front access to all data and management interfaces. This efficient packaging design provides both SFP and RJ-45 connectors for each of the 24 user ports, enabling deployment of the 3940 for service demarcation, aggregation, and transport applications in a wide variety of physical environments and network topologies, including fiber and microwave rings, point-to-point fiber, microwave mesh, and fiber or copper to subscriber.

The 3940 is based on Ciena's field-proven packet networking technology, deployed by dozens of network operators in tens of thousands of homes, businesses, and mobile base station cell sites. 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 3940 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 3940 is a high-performance 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 these combined capabilities is a state-of-the-art design that enables the 3940 to deliver the sophisticated Quality of Service (QoS), superior Virtual Local Area Network (VLAN) and virtual switching functions, and robust management and

### Features and Benefits

- Offers high-density, high-capacity all-GbE in compact 1RU form factor
- Provides bandwidth and scalability to support thousands of services on a single system using Carrier Ethernet business, residential and transport applications, including wireless backhaul
- Features state-of-the-art hardware design, including copper and optical interfaces for all interface ports, a wire-speed 24 Gb/s full duplex switching fabric, enhanced CPU and system memory, redundant fans, and redundant AC or DC power supplies
- Supports operational efficiency and advanced Ethernet features for highend business and transport services with modular serviceaware operating system, including PBB-TE and Ethernet Virtual Private Line/LAN/Tree
- Provides MAC address and VLAN scalability, interworking flexibility between disparate encapsulation formats, and improved security for customer L2VPNs through sophisticated virtual switching software architecture
- Helps ensure SLAs with carrier-class, MEF-14- compliant QoS features for broad service stratification and robust bandwidth allocation