ADTRAN®

Data Sheet

ADTRAN

9516

Next Generation EPON & 10G EPON OLT

10 Gbps   FTTH   Gigabit

Benefits

- -40C to +70C ambient operating temperature range
- All-front access
- 19-inch, 4RU chassis with 6 slots
- CableLabs Certified DOCSIS Provisioning of EPON (DPoE)
- Simple, scalable, flexible deployment
- Non-blocking architecture
- 2 x SCU, 10 x PIU (PON interface unit), 2 x LIU, 2 x power supply unit (PSU)
- EPON and 10G EPON optics: laser class B+/C+
- PON range: PR10-PR40 optics supported along with PON extender optics

Overview

The ADTRAN 9516 is a next-generation Ethernet Passive Optical Network (EPON) optical line terminal (OLT), supporting full 1G and 10G EPON functionality in a high-density, fully redundant, temperature-hardened platform. Built on a leading Layer-3 switch platform, the 9516 is at the forefront of PON-based access network technology. The 9516 delivers compact size, traffic management, multiple EPON modes (1G/1G, Turbo (2/1), 10G/1G, 10G/10G), and DPoE support along with other capabilities that are required by evolving access networks. With the headroom to provide expanded bandwidth and advanced feature sets, the 9516 supports the increasing deployment of FTTx networks, including fiber-to-the-home, fiber-to-the-business, fiber-to-the-desk, and fiber-to-the-tower.

As a scalable EPON OLT, the 9516 allows network operators to control costs and capacity with a "pay as you grow" platform. Additional blades, redundancy, line cards, and optics can be installed as needed, making the 9516 virtually future-proof. The chassis features 6 blade slots that can accommodate two switch and control units (SCUs), up to two line interface modules

(LIMs), and up to 3 PON interface modules (PIMs). The LIM slots, which provide the NNI/uplink connections, accept eight-port 1GE or 10GE blades.

The PIM slots accept eight-port 1G EPON or universal EPON blades to support 1G/1G, Turbo (2/1), 10G/1G, and 10G/10G EPON, with a total capacity of 24 PONs. Additionally, non-hardened C9500 OLT blades can be used in place of temperature-hardened units when the C9516 is located in a temperature-controlled environment. For added compatibility the same software that operates the ADTRAN 9500 OLT is used to run the 9516, providing craft familiarity, accelerating feature development, and lowering overall approval and support costs.

The 9516 provides convenient system operation and maintenance via Layer-2 switching; Layer-3 routing; QoS; Operations, Administration, and Maintenance (OAM); and security features. Additionally, the platform incorporates a fully redundant design that improves system availability and reliability to "five nines" levels. Together, these features provide an adaptive and powerful EPON solution that satisfies network policy and configuration requirements.

PRODUCT SPECIFICATIONS

System-at-a-Glance

- **10G-EPON OLT system based on commercial chipset**
- **10G and 1G GE-PON modules accommodated at the same time on a platform, including co-existence**
- **Non-blocking switch fabric**
- **Advanced traffic management (per PON LLID, VLAN and CoS)**
- **Full redundancy system options**
- **2GB main memory, 1GB (OS)/12MB (config)/2MB (BPS) flash memory**
- **Up to 256K MAC addresses**
- **Up to 128 K routing entries**
- **All filtering functions**
- **IPv6 compatible**

System Architecture

- **Uplink Slot (up to 2):**
  - 8x10 GE ports per module (up to 16x10 GE ports per chassis)
  - 8x1 GE ports per module (up to 16x1 GE ports per chassis)
  - Various SFP/XFP optic modules available

- **PON modules (up to 10):**
  - 8x10G EPON ports per module (up to 24x10 GPON ports per a chassis)
  - 8x1 GE EPON ports per module (up to 24x1 GPON ports per a chassis)
- **Slot capacity:** 6
- **Full-duplex Switching Capacity:** 320 Gbps (non-blocking)
- **Memory:** 2GB main memory
- **Management interfaces:** RS-232C, 10/100BaseT

Mechanical

- **19 inch Rack Mount, 4RU:**
  17.3 in (w) x 7.0 in (h) x 18.5 in (d)
  (440 mm x 177 mm x 471 mm)

Power Options

- **Power Consumption:** 600W max
- **Rated input voltage:** -48VDC or 110/220VAC

Environmental

- **Operating Temperature:** –40° F to +158° F (–40° C to +70° C)
- **Humidity:** 5% - 95% (Non-Condensing)

ORDERING INFORMATION

Equipment	Part No.
ADTRAN 9516 Next Generation EPON and 10G EPON 6 slot OLT	**1759516CHF1**
9516 SCM Hardened	**1759516F1**
9516 LIM-8 Hardened	**1759516LMF1**
9516 PIM8 Hardened	**1759516PMF1**
9516 AC Power Supply	**175916APF1**
9516 DC Power Supply	**1759516DPF1**
9516 HFC Power Supply	**1759516HPF1**
9516 Fan	**1759516F3**

ADTRAN Certified Supplier
ISO 9001
ISO 1401
TL 9000