



GPON OLT Access Module

Total Access® 5000 GPON OLT Access Module

Product Features

- G.984 compliant
- Temperature hardened for CO and RT deployments
- 21 OLT Access Modules per 23-inch Total Access 5000 chassis
- Two GPONs per OLT Access Module and 32 ONTs per GPON
- Full Class B+ Optics with 20 km reach
- Native Ethernet transport over GPON
- IPTV and RF Overlay Video support
- OMCI management to ONTs
- Industry-leading 10-year warranty

Carriers today are dealing with increasing competition, operational costs and demand for bandwidth, and many see GPON as a solution. For many carriers, GPON is the means to compete in an environment where bandwidth is king. GPON provides the flexibility, reliability, and bandwidth to give carriers a competitive advantage in today's market. The ADTRAN® Total Access 5000 system functions as a highly capable GPON OLT and flexible access platform to make a carrier's access network capable to meet a variety of legacy and emerging service requirements.

The Total Access 5000 is a carrier class multiservice access and aggregation platform that bridges the gap between the existing and the next-generation networks like GPON. With a pure Ethernet core, the Total Access 5000 system supports services over copper and fiber, easily scaling to support even the most bandwidth intensive applications. As a GPON OLT, Total Access 5000 provides the bandwidth and Ethernet switching capabilities needed to deliver a highly profitable service offering.

The ADTRAN GPON solution utilizes GPON Encapsulation Mode (GEM) to carry Ethernet traffic exclusively. ADTRAN has made a complete commitment to Ethernet in the access network with Total Access 5000, and the GPON OLT Access Module is furthering this direction. Data traffic is carried natively as Ethernet, which is a very efficient means of transporting high-bandwidth data connections.

Voice traffic is carried as VoIP packets to the GR303 gateway in the Total Access 5000 to provide a gateway to the legacy TDM network, or as SIP to an external softswitch to support the next generation of voice services. Finally, TDM transport through a GPON is provided with Pseudowire Emulation (PWE3), which terminates on the PWE3 gateway in the Total Access 5000 and on an ONT.

Video options with the Total Access 5000 GPON OLT include both IPTV and RF video. IPTV functions in the Total Access 5000 and the GPON OLT Access Module provide IGMP signaling and multicast replication functions. RF Video Overlay at 54–870 Mhz is supported on a GPON as a third wavelength at 1550 nm using outboard amplifiers and wavelength combiners.

The Total Access 5000 GPON OLT supports a wide variety of management options. Transaction Language 1 (TL1) is used to communicate alarms with Telcordia's NMA Operations Support System (OSS). An Ethernet 10Base-T or standard RS-232 DB-9 connector is used for Telnet access and connection to SNMP networks.

Environmentally hardened, the Total Access 5000 GPON OLT Access Module can be installed in CO and in RT environments. This allows a carrier to deploy GPON from whatever infrastructure is available or desired rather than limiting GPON to just CO deployments.



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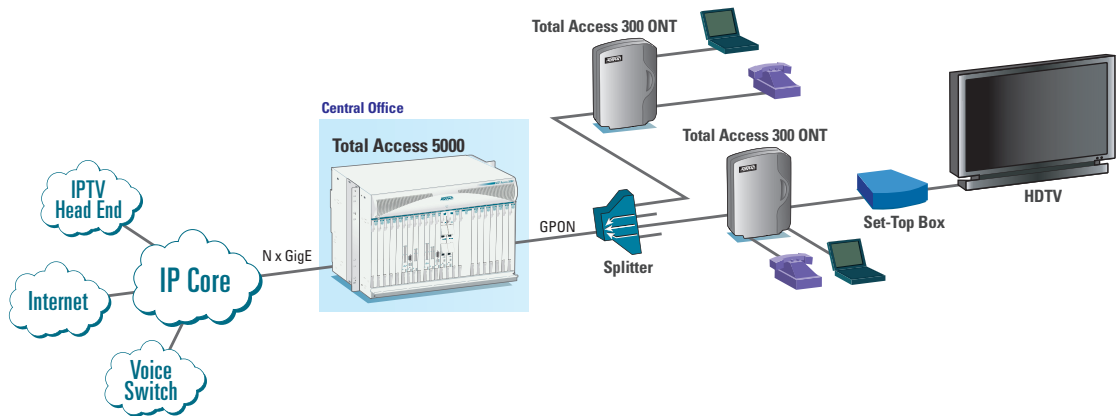
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ADTRAN is an ISO 9001, ISO 14001 and a TL 9000 certified supplier.

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Product Specifications

Mechanical

Dimensions

- Height: 9.25 inches
- Width: 0.8 inches
- Depth: 9.25 inches

Interfaces

Physical

- 2 separate single fiber interfaces on faceplate
- SC UPC connectors with shutters for eye safety

Capacities

- 2 GPON interfaces per GPON OLT Access Module
- 32 ONTs per GPON interface
- 21 GPON OLT Access Modules per 23-inch TA5000 chassis

Regulatory Standards

- NEBS
- GR-1089 CORE
- GR-63 CORE
- NRTL Listed
- FCC Part 15

Management

- Remote management through SNMP and TL1
- Ethernet interface on SCM for SNMP and Telnet access
- Craft interface on SCM
- OMCI to ONTs

Environment

- Operating Temperature: -40°C to +65°C
- Storage Temperature: -40°C to +70°C
- Relative Humidity: Up to 95%, noncondensing

Optics

- Class B+ compliant as specified in G.984.2 Amendment 1
- 20 km reach with 32x split

Ordering Information

Equipment	Part #
Total Access 5000 GPON OLT	1187500E1

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