



GPON OLT Access Module

Total Access® 5000 Quad GPON OLT Access Module

Product Features

- G.984 compliant
- SFP-based Optics
- Full Class B+ SFP-based Optics with up to 34km reach
- Temperature hardened for CO and RT deployments
- 2,688 subscribers per Total Access 5000 chassis
- Four GPONs per OLT Access Module and 32 ONTs per GPON
- 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, PON 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 SFP-based GPON OLT allows operates to increase their serving area up to 30km with 32 splits per PON interface or even up to 34km when using only 16 splits per PON.

The Total Access 5000 is a carrier class multi-service 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/MGCP to an external soft-switch 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 10/100Base-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.





GPON OLT Access Module



ADTRAN, Inc.
901 Explorer Boulevard
Huntsville, AL 35806

P.O. Box 140000
Huntsville, AL 35814-4000

256 963 8000 voice
256 963 8030 fax

General Information
800 9ADTRAN
info@adtran.com
www.adtran.com

**Pre-Sales
Technical Support**
888 5ADTRAN
support@adtran.com
www.adtran.com/support

Where to Buy
800 827 0807
www.adtran.com/where2buy

**Post-Sales
Technical Support**
800 726 8663
support@adtran.com
www.adtran.com/support

Regional Offices
Dallas, TX
972 830 9070
Denver, CO
303 471 9150
Kansas City, KS
800 471 8649
Newark, NJ
800 471 8656
Ontario, Canada
416 290 0585
Quebec, Canada
877 923 8726
San Antonio, TX
888 223 7671

International Inquiries
+1 256 963 8716 voice
+1 256 963 6300 fax
international@adtran.com
www.adtran.com/international



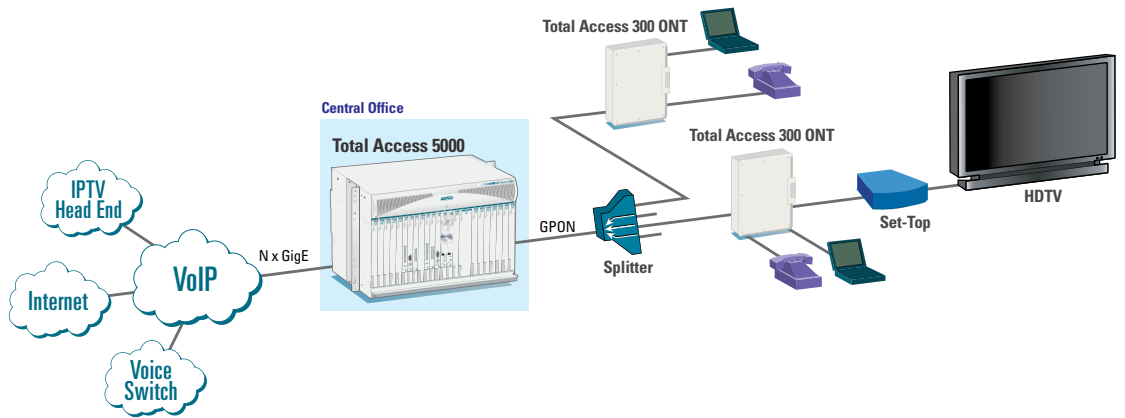
TL19.1270



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

61187502F1-8B October 2011
Copyright © 2011 ADTRAN, Inc.
All rights reserved. Printed in the U.S.A.

Total Access® 5000 Quad GPON OLT Access Module



Product Specifications

Mechanical

- Dimensions: 9.25 in. H x 0.8 in. W x 9.25 in. D

Interfaces

- 4-SFP single fiber interfaces on faceplate

Capacities

- 4 GPON interfaces per GPON OLT Access Module
- Capable of up to 64 ONTs per GPON interface
- 21 GPON OLT Access Modules per 23-inch Total Access 5000 chassis
- 2,688 subscribers per 23-inch Total Access 5000 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 Web, SNMP and Telnet access
- Craft interface on SCM
- OMCI to ONTs

Environmental

- **Operating Temperature:** -40°C to +65°C
- **Storage Temperature:** -40°C to +85°C
- **Relative Humidity:** Up to 95%, @ 50°C, noncondensing

Optics

- Class B+ compliant as specified in G.984.2 Amendment 1
- 30km reach with 64x and 32x split
- 34km reach with 16x split

Ordering Information

Equipment	Part #
Total Access 5000 GPON Quad OLT	1187502F1
SFP GPON 2.5G, 1.25G 30km	1442530G1

Specifications subject to change without notice. ADTRAN and Total Access are registered trademarks of ADTRAN, Inc. All registered trademarks and trademarks mentioned in this publication are the property of their respective owners.