Data Sheet

Total Access

10G Combo OLT

8-Port GPON, XGS-PON or Combo

FTTH | 10 Gbps | SDN Enabled | IPTV

Benefits

- **Supports symmetric residential, cloud and enterprise services**
- **Extends FTTH reach up to 60kms simplifying broadband expansion to rural and remote locations**
- **Extends gigabit service coverage area by 20% increasing revenue potential**
- **Supports multi-gigabit residential, business and mobile backhaul services**
- **Simplifies move to XGS-PON with "zero" operational impact, additional space or customer disruption**
- **Offers better ROI - 50% lower Capex, 50+% lower power, and 25% longer network lifespan**
- **Part of the ADTRAN family of 10G PON software-defined access (SD-Access) solutions**
- **Supports triple-play (voice, video and data) services**

Overview

Upgrading FTTP networks to 10G-capable networks provides service providers the performance to extend the life of their Optical Distribution Network (ODN) while providing an architecture that supports cost-effective business and backhaul services delivery at greater than gigabit speeds.

Delivering Cost-Effective Converged Residential and Business Services

The biggest challenge facing 10G FTTH service providers is deploying a single solution that meets the demands of premium business and backhaul services while, at the same time, delivering an attractive price point needed for mass-market residential applications. The ADTRAN Total Access 5000 10G Combo PON OLT module supports a flexible optics approach that allows for each of the eight faceplate ports to independently utilize multiple types of transceivers. This allows service providers the flexibility to determine the right technology (GPON or XGS-PON) for residential FTTH while also providing capacity for high-bandwidth business and mobile backhaul services. Any mix of technologies - GPON, XGS-PON or both - are supported on a per-port basis simplifying migration to 10G FTTH, delivering maximum flexibility without compromising future capabilities.

Better ROI From Fiber Investments

The TA5000 Combo PON OLT supports delivery of both cost-effective GPON and competitive multi-gigabit XGS-PON services over the same ODN, with the added benefit of GPON inheritance. Service providers can swap the ADTRAN GPON OLT module with the Combo PON OLT module, and all the GPON configurations are preserved while seamlessly enabling XGS-PON in the network. This flexibility of Combo PON allows for multiple revenue generating services including residential and business gigabit, multi-gigabit mobile backhaul, as well as smart grid and smart city applications, delivering higher revenue and better ROI at 50% lower capex. In addition, by integrating the coexistence element within the optics, Combo PON delivers 20% greater gigabit service coverage increasing your revenue potential.

SDN-Ready Solution

The Total Access 5000 10G Combo OLT supports provisioning via the ADTRAN Mosaic Cloud Platform, and OMCI provisioning, bridging the gap between current and next-generation fiber access networks.

The Total Access 5000 10G Combo OLT works in concert with the ADTRAN suite of cloud-managed, adaptive Wi-Fi solutions and XGS-PON optical network terminals (ONTs) to extend the gigabit experience throughout the home.

TOTAL ACCESS 10G COMBO OLT

Product Specifications

Front Panel Interfaces

- 8 x Combo PON OLT SFP+ ports capable of supporting:
  - 8 GPON interfaces using B+/C+/C++/D Class SFP GPON optics (1-8)
  - 8 XGS-PON interfaces using N1/N2 Class SFP+ XGS optics (9-16) - [E1/E2 future support)
  - 16 total combined GPON and XGS-PON interfaces with D1/D2 Class SFP+ Combo optics
- ITU-T compliant GPON and XGS-PON ODN Range configuration support: (optical budget dependent)
  - Standard 20 km
  - Extended 37.5 km
  - Maximum 60 km

Environment

- **Operating Temperature:** -40°F to 149°F (-40°C to 65°C)
- **Storage Temperature:** -40°F to 185°F (-40°C to 85°C)
- **Relative Humidity:** Storage: 0% to 95%, non-condensing

Physical

- **Dimensions:** 9.5in x 0.75in x 9.0in (241mm x 19mm x 228mm) (H x W x D)
- **Power Supply:** Dual -48 VDC Power Feed (redundant)
- **Power Draw:**
  - Typical ~ 68W
  - Max ~ 85W

Capacities

- Capable of up to 128 ONTs per GPON/XGS-PON Interface
- Total Access 5000 23-inch Chassis
  - 21 Access Modules; up to 21,000 subscribers per chassis (utilizing 1:128 split)
- Total Access 5006+ Chassis
  - 6 Access Modules; up to 6,000 subscribers per chassis (utilizing 1:128 split)
- Total Access 5004 Global Chassis
  - 4 Access Modules; up to 4,000 subscribers per chassis (utilizing 1:128 split)
- Total Access 5004 Micro Cabinet
  - 2 Access Modules; up to 2,000 subscribers per chassis (utilizing 1:128 split)

Management

- Mosaic Cloud Platform
- Mosaic One
  - ADTRAN GPON OLT provisioning inheritance support
- Remote Management through SNMP, CLI, and Web-Services APIs (HTTPS)
- Ethernet Interface on SCM for Web and Telnet/SSH Access (in-band or out-of-band)
- Craft and Ethernet Interfaces on SCM
- OMCI to ONTs

Regulatory Standards

- Applicable UL/CUL standards
- Applicable EN/IEC/AS/NZS standards
- FCC Part 15 Class A
- CE Mark (meets applicable safety, EMC, energy efficiency directives)
- NEBS Level 3

Ordering Information

Equipment	Part No.
Total Access 5000 8-port 10G OLT GPON Bundle with C+ Optics	4187518F22
Total Access 5000 8-port 10G OLT XGS-PON Bundle with N2 Optics	4187518F42
Total Access 5000 8-port 10G OLT Combo (GPON/XGS-PON) Bundle with D2 Optics	4187518F32

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