Adtran

Data Sheet

SDX 610 Series

Simple GPON optical network terminals (ONTs)

Gigabit

Zero-touch

Analytics

SDN Enabled

Benefits

- **Large portfolio consisting of 2.5GbE and 1GbE LAN interfaces, integrated voice ports, SFP ONT**
- **Low-power device that discretely blends into any environment with a compact, modern design**
- **Features recyclable enclosures, cloud-hosted documentation and optimized packaging**
- **Zero-touch service provisioning eliminates truck rolls for service upgrades**
- **Uniquely supports SFU, SBU, and MDU deployments streamlining installation**
- **Key part of wireless residential gateway deployment strategy**

Overview

The Adtran SDX 610 Series of GPON optical network terminals (ONTs) are designed with a simpler and more cost-optimized architecture that ultimately reduces the number of devices deployed and managed in a network. With concerns around increasing competition, operational costs and demand for bandwidth, the SDX 610 Series enables service providers to compete more cost-effectively while expanding broadband services.

SDN-ready solution

The SDX 610 Series of ONTs addresses today's key challenges around delivering cost-efficient, converged residential and business services. Part of the Adtran ecosystem of open-API access products, they enable easy integration into existing network infrastructure and SDN-based management systems. Simple zero-touch provisioning allows for end user installations without the need for truck rolls, reducing complexity and opex. With 2.5GbE and 1GbE LAN interfaces, as well as integrated voice ports, service providers can offer any flavor of multigigabit or Gigabit service. Also available is an GPON SFP ONT that offers a complete ONT in a small form factor pluggable package.

Coupled with Adtran service delivery gateways (SDGs), the SDX 610 Series of ONTs meet the demand of current and future Wi-Fi standards and enable seamless integration with Adtran's intelligent Mosaic One management system for enhanced control and monitoring. Our ONTs are specifically designed to remain at the premises for the long term, meeting the requirements of ever-advancing Wi-Fi residential gateways for years to come. Maintenance-free and with a compact, modern design, they discretely blend into a range of environments.

Committed to building environmentally responsible solutions

Meeting today's soaring bandwidth demands takes more than just great technology. It takes a company that's committed to building environmentally responsible solutions. Our SDX 610 Series is a distillation of everything we've learned over the past decade. It features recyclable enclosures, cloud-hosted documentation and optimized packaging, all designed to put sustainability first. We've worked closely with service providers to address some of their key concerns when it comes to building networks in a cost-effective and sustainable way. Just take a look at the low-power capabilities of our SDX 610 Series. It's compliant with Energy Efficient Ethernet (EEE) and European Union Code of Conduct v8. We're confident that it's going to help service providers in a big way.

SDX 610 SERIES

Product specifications

Network interfaces

- GPON uplink interface
- Single-fiber SC/APC connector
- 1490nm downstream and 1310nm upstream
- Compliant with ITU-T G.984.x GPON PMD
- Forward Error Correction (FEC) support
- Advanced Encryption Standard (AES) support
- Supports up to 1:128 split

Ethernet interfaces

- Ethernet port auto-negotiation or manual configuration
- MDI/MDIX automatically sense
- Hardware priority queues on downstream
- Enhanced buffer management

Ethernet service support

- 802.1q (2018) bridges and bridge networks
- 802.1x port-based network access control/port authentication
- 802.1ad VLAN stacking (Q-in-Q) and VLAN translation
- 802.1p bit marking/remarking
- Class of service based on VLAN-ID
- Eight queues, strict priority and/or weighted fair queue schedulers
- Configurable to EtherType and TPID
- VLAN IDs 0 – 4095; EVC configurable in the range of 2 – 4,094
- 2k jumbo frame support

Operations, administration and management

- ITU-T G.988 OMCI embedded operations channel interface support
- 15 min rolling counters
- Dying gasp alarm

LEDs

- Power
- LAN/GE1-4
- Optical
- Alarm

Video service support

- Mediaroom/Minerva video models
- IGMP v2/v3 snooping

Regulatory standards

- Supported regions: US, Canada, EU, UK, Australia, New Zealand
- Electromagnetic compatibility
  - FCC Part 15 Class B
  - EN 300 386
  - EN 55022
  - AS/NZS CISPR 22 Class B
- Safety
  - UL/CUL 62368-1
  - IEC 62368-1
  - EN 62368-1
  - AS 62368.1
- Environmental
  - ETS 300 019-2-3 Class 3.1 – environmental conditions and test for telecommunications equipment
  - EN 300 019-1-2 Class 2.3 – transportation
  - EN 300 019-1-1 Class 1.2 – storage
- Laser approvals
  - IEC 60825-1:2014
  - Safety of laser products – Part 1: equipment classification and requirements
- CE marked 93/68 EU
- European Union CE Mark declaration of conformity
- Energy efficiency ErP directive
- European Union Code of Conduct

Product specifications

Feature	610	611	611q	614
Access technology	GPON	GPON	GPON	GPON
Application	MDU/SMB	SFU	SFU	SFU
Environment	-25°C to +40°C	0°C to +40°C		
Relative humidity	up to 95% non-condensing			
1G Ethernet interfaces (10M/100M/1G)		1		4
2.5G Ethernet interfaces (10M/100M/1G/2.5G)	SFP (1G/2.5G)		1	
Dimensions (DxWxH)	80.0 x 18.1 x 15.2 mm	80.0 x 80.0 x 24.0 mm	90.0 x 80.0 x 35.0 mm	134.0 x 155.0 x 43.0 mm
Weight	55 g	0.20 lbs / 0.09 kg	0.24 lbs / 0.11 kg	0.75 lbs / 0.3 kg
Additional features	SFP+ ONT			
Mounting options	SFP+ cage	Desk/wall, fiber tray, wall mount		

SDX 610 SERIES

Ordering information

Equipment		Part No.
SDX 610	2.5GbE GPON SFP ONT	1442535F3
SDX 611	1GbE GPON ONT	1287933Fx*
SDX 611q	2.5GbE GPON ONT	1287934Fx*
SDX 614	4-port 1GbE GPON ONT	1287842Fx*
*Regional support for NA, UK, EU, AUS, and NZ		
Accessories		
SDX 611 fiber tray		1287433F2
SDX 611q fiber tray		1287434F1
SDX 614 fiber tray		1287417F1
SDX 610 Series UPS/BBU ONT wall mount (UPS/BBU sold separately)		1287475F1
7-pin Phoenix to barrel adapter cable		1287406F4

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