



ADTRAN

621V

10 Gbps Single-Family Unit ONT SDX Series



Features

- Symmetric 10 Gbps service delivery
- Integrated VoIP support
- Integrated 4-channel NG-PON2 optics
- 10G Base-T user interface
- Small 1RU half rack form factor
- IPTV video support including IGMP snooping feature set
- Traffic management through priority queuing, scheduling, and traffic shaping

Overview

Upgrading FTTP networks to 10G NG-PON2 provides network operators 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 NG-PON2 is developing a single system that meets the scale and flexibility needs of premium business and backhaul services while also meeting the price points needed for mass-market residential applications. The ADTRAN® SDX 6310 uses a flexible optics approach that allows for a single NG-PON2 OLT to utilize multiple types of optical transceivers, enabling the service provider to better align cost with the target application. Flexible optics range from low-cost, fixed wavelength optics for residential, business and small cell broadband applications, to Time and Wavelength Division Multiplexing (TWDM) optics for high-density, premium enterprise, data center, fronthaul and backhaul services using ONTs with tunable optics. Any mix of these optics options can be used on a single NG-PON2 OLT, allowing for maximum flexibility without compromising future capabilities.

Benefits

SDN-Ready Solution

The operational cost and complexity to connect a FTTP subscriber can be further reduced to accelerate the expansion of Gigabit broadband services. The ADTRAN solution supports provisioning through modern, open APIs, facilitating its deployment in next-generation SDN-based management systems. This, in concert with accelerated mass-market electronics and optics pricing, ensures that cost-sensitive residential broadband will be viable using NG-PON2 technology.

ADTRAN's comprehensive portfolio of FTTP devices is open, programmable and scalable. They support GPON, Active Ethernet, and NG-PON2 access interfaces. These devices are part of ADTRAN's SDN-optimized aggregation architecture that aligns with the forward-looking industry trend to build massively scalable and open systems.

ADTRAN 621V

Product Specifications

Ethernet Interfaces

- **One User Interface:**
 - ◆ RJ-45 for 100m/1/2.5/5/10G Base-T
- 10 Gbps Symmetric Throughput
- Ethernet Port Auto Negotiation or Manual Configuration
- MDI/MDIX Automatically Sense
- Hardware Priority Queues on the Downstream Direction in Support of CoS

Dimensions

- 6.4 in. x 9.75 in. x 1.5 in. (LxWxH)

Power Supply

- +10 – 23V DC (Feed via External AC/DC Adapter)
- 3-PIN Molex Power Adaptor Input
- Dying Gasp Support
- Multi-pin Connector for Power and Alarm Input from UPS
- **Power Consumption:**
 - ◆ Less than 30W

Network Interface

- XFP WAN compliant with ITU-T G.989 NG-PON2 Standards
- Class B+ Optics Support
- DBA (Dynamic Bandwidth Allocation)
- Mapping of xGEM Ports into a T-CONT with Priority Queues Based Scheduling

POTS Interface

- 2 RJ-11 Interfaces
- 3-REN, 50V RMS
- **VoIP Voice**
 - ◆ Both SIP and MGCP
- **TDM Voice**
 - ◆ Both GR.303, GR-57, and TR-08
- Full CLASS Feature Set
- Both ANSI and ETSI POTS
- T.38 Facsimile
- Configurable Dial Plan
- Configurable Country Specific Ring-back Tones (Frequency and Cadence)
- DHCP Client or Static IP Configuration
- Optionally Metallic Loop Testing

OAM

- Manageable through Mosaic Cloud
- Support for Open OMCI

FCC/EMC

- FCC Part 15 Class A
- EN 300 386, with compliance to the EMC directive 89/336/EEC
- EN 55022/CISPR22 Class A

Safety

- UL/CUL 60950
- EN 60950-1
- IEC 60950
- AS/NZS 60950

Regulatory

- ETS 300 019-2-3 for Class 3.1E– Environmental conditions and test for telecommunications equipment
- EN 300 019-1-2 for ETS Class 2.3 –Transportation
- EN 300 019-1-1 for ETS Class 1.2 – Storage
- ETSI 300 132-2 – Power Supply interface at the input to telecommunications equipment

LEDs

- Status
- Network
- Management
- Wavelength
- Voice
- Data

Single Family Unit ONT

Ordering Information

Equipment	Part No.
ADTRAN 621V, 10 Gbps Single Family Unit ONT	1287821F1

ADTRAN 621V



ADTRAN, Inc.
901 Explorer Boulevard
Huntsville, AL 35806
256 963 8000

General Information
800 9ADTRAN
www.adtran.com/contactus

**Canada Headquarters—
Toronto, Ontario**
+1 877 923 8726
+1 905 625 2515
sales.canada@adtran.com

Canada—Montreal, Quebec
+1 877 923 8726
+1 514 940 2888
sales.canada@adtran.com

Mexico and Central America
+1 256 963 3321
+1 52 55 5280 0265 Mexico
sales.cala@adtran.com

South America
+1 256 963 3185
sales.brazil@adtran.com
sales.latam@adtran.com

61287821F1-8A

May Copyright © 2018 ADTRAN, Inc. All rights reserved. ADTRAN believes the information in this publication to be accurate as of publication date, and is not responsible for error. Specifications subject to change without notice. ADTRAN® and the other trademarks listed at www.adtran.com/trademarks are registered trademarks of ADTRAN, Inc. or its affiliates in various countries. All other trademarks mentioned in this document are the property of their respective owners.

ADTRAN warranty duration and entitlements vary by product and geography. For specific warranty information, visit www.adtran.com/warranty.

ADTRAN products may be subject to U.S. export controls and other trade restrictions. Any export, re-export, or transfer of the products contrary to law is prohibited. For more information regarding exportation of ADTRAN items (e.g. commodities, technology, software), please visit www.adtran.com/exportlicense.

