

ADTRAN

# SDX 6310-16

SDN-Programmable 10G PON OLT



## Benefits

- Supports 10G residential, cloud and enterprise services
- Offer broadband video from multiple video content providers and deployment models
- Accelerates differentiated service creation via open, multi-vendor, SDN programmability
- Utilizes pluggable optics—low-cost, fixed-wavelength and flexible TWDM optics
- Supports multiple PON standards
- Extends life of optical network by up to 20 years
- Reduces operational costs through SDN management and control systems
- Part of ADTRAN's extensive and growing family of fiber access technologies

## Overview

The ADTRAN SDX 6310 is an open, programmable, and scalable access device that supports XGS-PON and NG-PON2 access interfaces. This OLT access device is part of ADTRAN's next-generation, data center optimized aggregation architecture that aligns with the forward-looking industry trend to build massively scalable and open systems.

### Open, Programmable, Scalable

Built around an open architecture, the SDX 6310 can be aggregated by any high-density aggregation system, including the ADTRAN SDX 8200 and 8300 Series aggregation switches. From a programmability perspective, the SDX 6310 has open APIs that utilize standard NETCONF/YANG interfaces for all management functions, easing the integration into an SDN-controlled environment. For scalability, the SDX 6310 is built on a “pay-as-you-grow” architecture enabling the addition of GPON/NG-PON2 OLTs as needed without the upfront investment or system constraints of a Bigiron chassis system. In addition to being open, programmable and scalable, all embedded software functions in the OLT, including ONT

management, PON provisioning and IMGMP processing, are virtualized and can be hosted in an external server to enable massive scalability and avoid the system constraints of embedded processing systems.

### High-Performance with Flexibility

The SDX 6310 offers non-blocking Nx40/100G uplink interfaces with embedded redundancy options to ensure that they can scale to support next-generation of residential, business and backhaul services.

The next-generation ADTRAN SDX 6310 supports 16 XFP interfaces for 10/10G or 10/2.5G XGS-PON, NG-PON2, or XG-PON1 an ultra-flexible, high-capacity architecture with support for up to 128 users per PON.

The SDX 6310 offers all of the carrier-class features (i.e., ONT management, clocking, VLAN tag manipulation, resiliency, etc.) of a traditional chassis-based OLT system, but with much more flexibility and scalability with an open architecture that cannot be matched by a closed, vendor-specific chassis system.



## Product Specifications

### Front Panel Interfaces

- 16 XFP interfaces for 10/10G PON access links
- 4x100G uplink interfaces (also capable of operating at 40G)

### Performance

- Non-blocking uplinks capacity with 200G to ToR switch

### Capacities

- Capable of up to 128 ONTs per PON interface

### Management

- Remote management through NETCONF, telnet, and SSH
- Local Ethernet and USB interfaces for management
- OMCI to ONTs

### 10G PON Optics

- XGS-PON
- NG-PON2

### IPTV Support

- IGMP v2 and v3
- Dynamic Host Configuration Protocol (DHCP) Support with Option 82
- Lightweight DHCPv6 relay agent support

### Environment

- **Operational Temperature Range in Environmentally/Controlled Central Office Environments:** 0° C to +45° C (32° F to 113° F)
- **Storage Temperature Range:** -40° C to +85° C (-40° F to 185° F)
- **Relative Humidity:** up to 95%, noncondensing

### Physical

- **Chassis:** 1U, 19 in. Rack mountable metal enclosure
- **Dimensions:** 17.3 x 1.7 x 17 in (W x H x D), 439 x 43 x 431 mm (W x H x D)

### Electrical:

- Power Supply: AC or DC redundant
- Maximum Power consumption: 550W
- Input Voltage Rating:
  - AC: 100 to 240 VAC, 50 - 60Hz (5.5 Amps to 2.3 Amps)
  - DC: -40.5 to -60 VDC (13.6 Amps to 9.2 Amps)
- Replaceable power modules (MAX power consumption rating of 550W)
- **Redundancy:**
  - Hot swappable power supplies
  - Hot swappable fans

### Regulatory Agency Approvals

- FCC Part 15 Class A
- NEBS
- GR-1089 CORE
- GR-63 CORE
- NRTL listed
- CE marking
- RoHS 6 of 6

## Ordering Information

Equipment	Part No.
SDX 6310-16 Access Switch, 2DC Front to Back	11971320F1
SDX 6310-16 Access Switch, 2AC Front to Back	11971320F2
SDX 6310-16 Access Switch, 2AC Front to Back INTL	11971320F2IN
SDX 6310-16 Access Switch, 1DC Front to Back	11971320F3
SDX 6310-16 Access Switch, 1AC Front to Back	11971320F4
<b>Accessories</b>	
SDX 6310-16 Fan Module, Front to Back	11971321F1
SDX 6310-16 DC Power Module, Front to Back	11971063F1
SDX 6310-16 AC Power Module, Front to Back	11971064F1



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