

## SDX 630 Series

## SDX 630

XGS-PON SFP+ optical network terminal (ONT)



10 Gigabit



Zero-touch



Analytics



Enabled



## Benefits

- Eliminates the need for a separate external ONT and offers an ultra-compact solution for high-bandwidth applications
- Seamlessly integrates with existing CPE such as SDGs, FSP 150 Series EADs and NetVanta switches
- Delivers exceptional energy efficiency with power consumption less than 3W
- Zero-touch service provisioning eliminates truck rolls for service upgrades
- Advanced Ethernet OAM provides better insights and diagnostics through remote testing, end-to-end visibility and fiber monitoring capabilities
- Key part of wireless residential gateway deployment strategy

## Overview

**The Adtran SDX 630 is an ultra-compact, pluggable XGS-PON SFP+ optical network terminal (ONT) designed for seamless integration into existing customer premises equipment (CPE).** By eliminating the need for a separate external ONT, it simplifies deployments for high-bandwidth applications, delivering speeds up to 10Gbit/s. From streaming 4K video on multiple devices to supporting demanding cloud-based workloads, the SDX 630 meets the full spectrum of modern connectivity needs. Easy to deploy, it features zero-touch service provisioning, enabling rapid installation without manual configuration.

## Ultra-compact, integrated design

The SDX 630 XGS-PON SFP+ ONT is a fully integrated ONT housed in an ultra-compact small form-factor pluggable (SFP) module. Designed for high-bandwidth applications, it plugs directly into network devices, enabling seamless extension of XGS-PON deployments into existing access networks or customer premises equipment (CPE). One of its key advantages is its discreet, space-saving design, eliminating the need for separate

power supplies or additional cabling typically required with external ONTs. With power consumption of less than 3W per module, it also offers superior energy efficiency. Together, these benefits make the SDX 630 a cost-effective, high-performance solution for point-to-multipoint (P2MP), fiber to the home (FTTH), fiber to the building (FTTB) and fiber to the curb (FTTC) applications.

## Seamless integration with SDGs

When paired with Adtran Service Delivery Gateways (SDGs), the SDX 630 delivers a future-ready solution that supports both current and next-generation Wi-Fi standards, ensuring long-term compatibility with evolving residential gateway technologies. Built for longevity, the SDX 630 features an unobtrusive SFP form factor that plugs directly into Adtran SDGs. With no need for ongoing maintenance, it offers a truly plug-and-play experience for scalable, high-performance fiber deployments. Its seamless integration with Adtran's Mosaic One management platform provides centralized visibility, control, and diagnostics, streamlining network operations and simplifying service delivery.

# SDX 630

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## Product specifications

### Network interfaces

- XGS-PON uplink interface
- Single-fiber SC/APC connector
- 9.9532Gbps symmetric throughput
- 1577nm downstream and 1270nm upstream
- Compliant with ITU-T G.9807.1 XGS-PON PMD standards
- Power level(s)
  - Transmit: +4 to +8dBm
  - Receive: -9 to -28dBm
- Forward Error Correction (FEC) support
- Advanced Encryption Standard (AES) support
- Supports up to 1:128 split

### Ethernet interfaces

- 1G/2.5G/10G Base-FX via XGMII/SGMII
- Ethernet port auto-negotiation or manual configuration

### 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
- 9k jumbo frame support
- BBF.247 issue 1 [in force] support
- Automatic MAC address learning and aging
- Up to 256 MAC address entries
- MAC address limiting
- Synchronous Ethernet (SyncE) support

### Operations, administration and management

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

### Environmental

- Host device operating temperature: -13°F to 104°F (-25°C to +40°C)
- SDX 630 SFP cage temperature: Supports operation up to 149°F (+65°C) when installed in host device
- Storage temperature: -13°F to +185°F (-25°C to +85°C)
- Relative humidity: 5 to 95%, non-condensing

### Physical

- Dimensions: 80.0 x 18.1 x 15.2mm (D x W x H)
- Weight: 55g
- Max power consumption: 2.7W
- Complies with MSA requirements
- Compliant with SFP+ MSA, SFF 8431 rev. 4.1
- Compliant with SFF 8432 Rev.5.0 mechanical dimension
- Compliant with digital diagnostic SFF-8472 Rev.11.0
- EU RoHS compliance for 2015/863/EU

### Regulatory Standards

- United States:
  - Safety – UL 60950-1 2nd Edition or UL 62368-1 2nd Edition, with NRTL Marking
  - EMC – FCC CFR 47 Part 15 Class B
  - CB Scheme to IEC 62368-1
- Canada:
  - Safety – CSA C22.2 No. 60950-1-07 or CSA C22.2 No.62368-1 2nd edition with NRTL marking
  - EMC – CAN ICES-003 issue 5 class B
- European Union:
  - Safety Directive – EN 62368-1 2nd Edition
  - EMC Directive – ETSI EN 300 386 v2.1.0 Class B
  - EMC Directive – EN 55032
  - CE Mark using EN 62368-1
  - WEEE Directive – waste electrical and electronic equipment compliance
  - Broadband code of conduct ErP directive 2009/125/EC
  - RoHS directive 2015/863/EU
  - REACH directive 2006/1907/EC
  - POPs regulation (EC) No 850/2004
  - Packaging and packaging waste directive 94/62/EC
  - CE Mark and UKCA for Great Britain
- Australia:
  - Safety – AS/NZS 62368.1
  - EMC – CISPR 32 Class B
  - RCM mark
- 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
- ITU-T K.21 enhanced resistibility of telecommunication equipment installed in customer premises to overvoltage and overcurrent
- 2015/863 restriction of hazardous substance

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## Ordering information

Equipment		Part No.
SDX 630	XGS-PON SFP+ ONT	1287940F1*

\*Minimum order quantity of 12. Must be ordered in multiples of 12.

