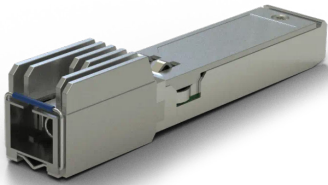


SDX 630 Series

630

XGS-PON SFP+ Optical Network Terminal (ONT)



10 Gigabit



Zero-Touch



Analytics



Enabled

Benefits

- **Seamless Integration of PON ONU Function for Ethernet Switches, Routers, Residential Gateways, G.fast DPUs, and Any Third Party Ethernet Standards-Based Devices**
- **Compatible with Any Ethernet-Based Device with a Standard 1G, 2.5G, or 10G SFP/SFP+ Interface**
- **Deliver Cost-Effective Residential, Business, and Backhaul Services**
- **Zero-touch Service Provisioning Eliminates Truck Rolls for Service Upgrades**
- **Manage an End-to-End PON Deployment with Productivity Tools for Monitoring, Troubleshooting, Provisioning, and Upgrading Networks**
- **Traffic Management Through Priority Queueing, Scheduling, Policing, and Traffic Shaping**
- **Key Part of Wireless Residential Gateway Deployment Strategy**

Overview

The Adtran SDX 630 Series of XGS-PON Optical Network Terminals (ONTs) are designed to address the market with industry-leading voice, data, and video capabilities. Service providers will benefit from the high data rates of fiber optic transmission and the flexibility offered by Adtran's portfolio of Ethernet-based technology. In addition, these solutions support demanding residential and business Gigabit services, cloud services, and remote work.

Expanding network capability requires next-generation 10G architectures. These architectures offer the capacity and scale to economically support Gigabit and multigigabit service demand well into the future. The SDX 630 XGS-PON SFP+ ONT is a complete ONT in a small form-factor pluggable (SFP) package. It supports high-bandwidth applications by plugging the module directly into a network device, which extends XGS-PON deployments into existing access networks or customer premises equipment. One advantage of this unobtrusive design includes the reduction of space since there is no need for a separate power supply or extra cabling typically included with an external ONT. At less than 3 W per SFP+ ONT, lower power consumption is another significant advantage to consider. All of these advantages give service providers a low-cost alternative for point-to-multipoint (P2MP), fiber-to-the-home (FTTH), fiber-to-the-building (FTTB), or fiber-to-the-curb (FTTC) applications.

SDN-Ready Solution

Additionally, the operational cost and complexity of connecting an FTTP subscriber can be further reduced to accelerate the expansion of Gigabit or multigigabit broadband services. Adtran 630 Series ONTs support provisioning through modern, open APIs, facilitating 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 via 10G PON technologies. 630 Series ONTs also support OMCI provisioning, bridging the gap between current and next-gen software-defined access (SD-Access) networks.

The SDX 630 works in concert with Mosaic One, Adtran's intelligent Software as a Service (SaaS) management suite. Mosaic One helps to accelerate the expansion of Gigabit broadband services through zero-touch service activation and unmatched network analytics and visibility. Experience the benefits of end-to-end network management with Mosaic One and deliver an exceptional subscriber experience.

SDX 630

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 Dependent on ODN Architecture

OAM

- ITU-T G.988 OMCI Embedded Operations Channel Interface Support
- Open OMCI Standards Support
- 15 Min Rolling Counters
- Threshold and Dying Gasp Alarms

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 for Service Flexibility
- VLAN IDs 0 – 4095; EVC Configurable in the Range of 2 – 4,094
- Supports 9k Jumbo Frame
- Support BBF.247 Issue 1 [in force]
- Automatic MAC Address Learning and Aging
- Up to 256 MAC Address Entries
- MAC Address Limiting

Physical

- Dimensions: 80.0 mm x 18.1 mm x 15.2 mm (D x W x H)
- Weight: 55g
- Max Power Consumption: 2.7 W

- 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

Environmental

- Operating Temperature: -13° F to +104° F (-25° C to +40° C)
- Storage Temperature: -13° F to +185° F (-25° C to +85° C)
- Relative Humidity: 5 to 95%, Non-Condensing

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

SDX 630

Ordering Information

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

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

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