

ADTRAN

# 8110-08/24/48P

## Layer 3 Gigabit Ethernet Switches with PoE+ SDX Series



### Benefits

- 8, 24, or 48 10/100/1000Base-T ports
- Up to four SFP+ ports with support for 10 Gbps
- RJ-45 console port and Micro-USB port for management
- Non-blocking Layer 2 and Layer 3 switching capacity up to 90 Gbps
- Fully managed (Web GUI, CLI, SNMP, JSON-RPC)
- Industry Standard CLI and CONFIG
- 802.3at (POE+), 802.3af (PoE) and Legacy PoE
- Feature-rich ADTRAN Mosaic Switch Engine for Enterprise Ethernet switching
- Supports 802.1q VLANs and Trunking, STP, IGMP
- Advanced Smart Switching features (ACLs, L2/L3/L4 DiffServ, QoS policies, LACP Link Aggregation, Broadcast control, Denial of service protection)
- Faster VoIP deployments with VoIP VLAN and discovery
- Port and Queue level Policing and Shaping

### Overview

**The SDX 8110 series of enterprise-class, fully managed Gigabit POE+ switches are the best switches for Voice over IP (VoIP).** They are purpose built for enterprises looking to upgrade their networks with high-performance, reliable, scalable and easy to manage switching solutions. The SDX 8110 switches offer advanced multi-layer switching, high bandwidth capabilities, “voice-aware” features, and the right functionality to enable scaling from a small business network to enterprise size networks.

#### Best VoIP Switch, Period.

The SDX 8110 series Gigabit switches are the best switches for VoIP, delivering high voice fidelity, faster VoIP deployment and ease of management, and maximum network uptime.

- **Voice Fidelity:** The switches provide 12, 24 or 48 GigE ports with SFP+ (10 Gig) ports, delivering up to 90 Gbps of uplink capacity to support a greater number of HD voice connections, video streaming, Wi-Fi® and other bandwidth-intensive applications.
- **Faster Deployment and Ease of Use:** Zero-touch phone setup simplify VoIP deployments. The switches offer flexible management options including Web GUI and Command Line Interface (CLI).
- **Guaranteed Maximum Uptime:** The SDX 8110 series switches include an industry standard warranty, World Class Product Support, advance hardware replacement, and an optional extended warranty minimizing business risk.

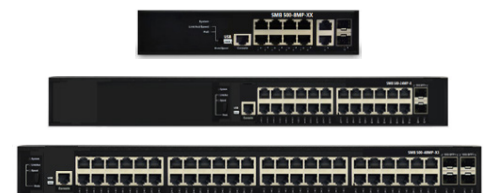
### Security

The SDX 8110 series Gigabit switches offer a variety of data security features including Denial of Service (DoS) protection, MAC-based port security, 802.1x port authentication, multilevel user passwords, Secure Shell (SSH) and Secure Socket Layer (SSL) for encrypted user login. In addition, the switches support Authentication, Authorization and Accounting (AAA) for authentication with RADIUS and TACACS+.

### Administration

The ADTRAN Mosaic Switch Engine offers both a CLI and an intuitive Web-based GUI. To automate setup and configuration, the SDX 8110 switches enable DHCP out of the box which provides the ability to discover and provision the switch configuration. Tools such as network forensics, cable and SFP diagnostics simplify troubleshooting.

The SDX 8110 Switches can be remotely managed by ADTRAN’s n-Command® MSP platform. ADTRAN n-Command platforms offer the ability to discover devices, make mass configuration changes or firmware upgrades, backup/restore configuration, and generate inventory reports for asset management. The ADTRAN n-Command MSP also offers VoIP VQM and reporting, as well as an industry leading, easy-to-use, Graphical User Interface (GUI).



# SDX 8110-08/24/48P

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## Product Specifications

### Physical Interfaces

#### Ethernet Ports

- **SDX 8110-08:**
  - ◆ 10 x 10/100/1000Base-T
  - ◆ 2 x 1Gbps SFP Port
- **SDX 8110-24:**
  - ◆ 24 x 10/100/1000Base-T
  - ◆ 2 x 10 Gbps SFP+ Ports
- **SDX 8110-48:**
  - ◆ 48 x 10/100/1000Base-T
  - ◆ 4 x 10 Gbps SFP+ Ports

#### Console Port

- RJ-45
- Micro USB

### Switching Performance

- Non-blocking Layer 2/3 Switching
- 32,000 MAC addresses
- 4,095 VLANs
- 90 Gbps forwarding bandwidth

### Layer 2 Support

- 802.1q VLAN switching and Trunking
- 802.1d Spanning Tree
- 802.1w Rapid STP
- 802.1s Multiple STP
- 802.3ad Link Aggregation
- Jumbo Frames (10240)
- IGMP v1/v2/v3 Snooping/Querier/Proxy
- MLD v1/v2 Snooping
- 802.3x Flow Control
- GVRP/MRP/MVRP

### Layer 3 Support

- DHCP Relay
- UPnP
- 1000 ARP Entries
- 128 Static Routes (IPv4 and IPv6)
- OSPF v1 and v2

### Diagnostics

- Port and Flow Mirroring
- ARP Inspection
- LLDP (802.1ab)
- LLDP-MED
- Ping, Traceroute
- sFlow
- Cable Diagnostics

### Front Panel Status LEDs

- Status
- LAN: Link, Activity
- LED Port Button: Toggle Port LEDs between Link, Activity, and POE Status

### Quality of Service

- Port based
- 802.1p, DiffServ, precedence, DSCP
- Eight hardware queues per port
- Classification and remarking ACLs
- Strict Priority Scheduling
- Weighted Round Robin (WRR)
- Policing and Shaping per port

### VLAN

- 4K VLANs simultaneously
- Port-based VLANs
- 802.1Q Tagged Trunked VLANs
- Voice VLANs
- MAC-based VLAN
- Management VLAN
- Q-in-Q VLAN
- Private VLANs

### Security

- 802.1x Port Authentication
- L2 VLAN client isolation
- Port Security
- IP source guard
- RADIUS/TACACS+
- DoS Protection
- DHCP Snooping
- Hardware ACLs
- Users and Privilege Levels

# Layer 3 Gigabit Ethernet Switches with PoE+

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## Administration

- CLI (Console/Telnet/ SSH)
- SNMP v1,v2c,v3
- Web-based GUI
- Dual image
- SYSLOG
- RMON
- sFlow
- RADIUS
- TACACS+
- NTP
- n-Command Support
- JSON-RPC

## PoE

- 802.3af (PoE), 802.3at (PoE+) and Legacy PoE
- Max 30 Watts per Port
- **SDX 8110-08:**
  - ◆ 150 Watts (Total)
- **SDX 8110-24:**
  - ◆ 740 Watts (Total)
- **SDX 8110-48:**
  - ◆ 740 Watts (Total)
- Power Management
- POE Scheduling

## Environment

- **Operating Temperature:** 0° to 50°C (32° to 122°F)
- **Storage Temperature:** -20° to 70°C (-40° to 158°F)
- **Relative Humidity:** Up to 95%, non-condensing

## Physical and Power

### SDX 8110-08-150W

- **Chassis:** 1U Metal Enclosure,
- **Desktop, Wall and Rackmountable**
- **Dimensions:** 1.73 in. x 8.66 in. x 9.53 in.  
(4.4 cm x 22 cm x 24.2 cm) (H x W x D)
- **Weight:** 4.63 lbs (2.1 Kg)
- **Voltage:** 100-240 VAC, 50/60 Hz
- **Max Power:** 170 Watts

### SDX 8110-24-740W

- **Chassis:** 1U, 19in. (48.26cm)
- **Rackmountable**
- **Dimensions:** 1.73 in. x 17.4 in. x 8.31 in.  
(4.4 cm x 44.2 cm x 21.1 cm) (H x W x D)
- **Weight:** 8.6 lbs. (3.9 kg)
- **Voltage:** 100-240 VAC, 50/60 Hz
- **Max Power:** 900 Watts

### SDX 8110-48-740W

- **Chassis:** 1U, 19in. (48.26cm)
- **Rackmountable**
- **Dimensions:** 1.73 in. x 17.4 in. x 14.76 in.  
(4.4 cm x 44.2 cm x 37.5 cm) (H x W x D)
- **Weight:** 12.35 lbs. (5.6 kg)
- **Voltage:** 100-240 VAC, 50/60 Hz
- **Max Power:** 900 Watts

## Agency Approvals

- FCC Part 15 Class A
- IECS-003 Class A
- ETSI EN 300 386
- UL/CSA 60950-1 and IEC60950-1
- CE Marking
- RoHS Compliant
- RCM mark for Australia and New Zealand

## Warranty

- 1 Year Warranty with Advanced Replacement
- Extended Warranty Available through ProCare
- 7x24 Product Support Available through ProCare

# SDX 8110-08/24/48P

## Ordering Information

Equipment	Part No.
<b>Chassis</b>	
SDX 8110-08-150W	17108108PF2
SDX 8110-24-740W	17108124PF2
SDX 8110-48-740W	17108148PF2
<b>Brackets</b>	
19" SDX Rackmount Bracket – 8 Port	1700518F1
19" SDX Rackmount Bracket – 24/48 Port	1700519F1
SDX Wallmount Bracket – 24 Port	1700520F1
<b>SFPs</b>	
1000Base-SX 850nm SFP	1200480E1
1000Base-LX 1310nm SFP	1200481E1
1000BaseT Copper SFP	1200485G1
2.5 Gbps Multimode SFP	1200482G1
2.5 Gbps Singlemode SFP	1200483G1
10G Base-SR 850nm SFP+	1700485F1
10G Base-LR 1310nm SFP+	1700486F1
<b>Interconnect Cables</b>	
SFP+ (1 meter)	1710484F1
SFP+ (3 meter)	1710484F3
SFP+ (5 meter)	1710484F5



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