



SDG-9712o

Dual-band Wi-Fi 7 outdoor access point

Benefits

- Weather-hardened, dual-band Wi-Fi 7 access point for outdoor applications
- Zero-touch installation via an intuitive mobile app
- High-performance dual-band mesh Wi-Fi with support for MLO, MRU-puncturing and 160MHz channels
- Multi-core ARM processor to power next-generation smart home applications
- Advanced antenna design ensures enhanced rate reach and 360° coverage
- Open cloud-management support - Intellifi or TR-069

Overview

Adtran's Service Delivery Gateway (SDG) 9712o is a rugged, high-performance Wi-Fi 7 (802.11be) outdoor access point (AP), designed to provide secure WLAN connectivity in outdoor environments. Part of Adtran's portfolio of mesh Wi-Fi 7 solutions for both indoor and outdoor settings, the SDG-9712o is ideal for extending outdoor coverage for homes, ranches, retail stores, cafes and common areas within multi-dwelling units (MDUs).

This IP55-rated device is compliant with ITU-T K.21 surge resistance, ensuring reliable performance in challenging environments. It features powerful 4x4 antennas on both 2.4GHz and 5GHz bands. Equipped with 2.5GbE PoE++ (WAN), the SDG-9712o extends multigigabit outdoor coverage, seamlessly connecting laptops, mobile phones, tablets and smart home devices anywhere across the property or in common areas of apartment complexes.

Supporting PoE++ (802.3bt) powering, the SDG-9712o simplifies connectivity – simply plug a Cat5/6 cable into the 2.5GbE WAN port and connect the other end to a PoE++ source such as a router, switch or PoE injector. Alternatively, it can be powered by a standard AC/DC power brick. The SDG-9712o is pole-mountable.

Adtran's residential Wi-Fi solutions, including 800, 8000 and 9000 Series SDGs, offer operators a choice of market-leading open-source platforms. They support Adtran's Intellifi® managed Wi-Fi solution and any TR-069-based ACS, enabling comprehensive remote management of the SDGs.

SDG 9712o

High-level technical specifications

Network interfaces

- 1x 2.5GbE PoE++ WAN port

WLAN interfaces

- Compliant with IEEE 802.11b/g/n/ac/ax/be
- Dual-band radio configuration
 - 2.4GHz 4x4 up to 40MHz
 - 5GHz 4x4 up to 160MHz
- 3 x SSIDs per radio
- Integrated internal antenna array
- WPA3 support
- WPA2/WPA3 mixed-mode support

Software features*

- Multiple WAN services
 - DHCPv4/v6
 - RFC2516 PPPoE
 - PPPoE pass-through
- DNS proxy server
- Dynamic DNS client
- DHCP server, client, and relay
- DHCP options 60 and 121
- NAPT and NAT
- IGMPv2/v3 proxy and snooping
- LAN port to VLAN mapping
- Port forwarding
- Universal plug-and-play (UPnP)
- Network time protocol (NTP)
- Firewall with stateful packet inspection
- IPv6
- Stateless address autoconfiguration (SLAAC)
- DHCPv6
- DNSv6
- Mesh Wi-Fi features
 - IEEE 802.11 4-address (4mac) encapsulation
 - IEEE 802.11k Radio resource measurement
 - IEEE 802.11v Wireless network management
 - IEEE 802.11r Fast BSS transition
 - Zero-touch AP pairing
- Custom default themes (CDT)/configurations
- Touchless quality of service (wired and Wi-Fi)
- AutoWAN
- TR-069 Remote Management
- TR-181 Device Data Model

*Features depend on firmware load

Ethernet services

- Symmetric 2.5 Gbit/s Throughput
- 802.1D Bridging
- Virtual Switch Based on 802.1q VLAN
- VLAN Tagging/Detagging Per Ethernet Port
- VLAN Stacking (Q-in-Q) and VLAN Translation
- IP ToS/DSCP to 802.1p Mapping
- Quality of Service (QoS)
 - VLAN-ID
 - 802.1p bit
 - DSCP to p Bit Translation
- Marking/Remarking of 802.1p
- IGMP v2/v3 Snooping

Dimensions

- Size: 8.5" x 5.0" x 2.9" (216mm x 129mm x 74mm) (H x W x D)
- Weight: 1.08 Kg (2.38 lbs)

Operating environment

- -22° F 131° F (-30° C 55° C)
- Humidity: 5% - 95% condensing

Safety and EMI

- UL /cUL Listed
- FCC Part 15, Class B
- FCC Part 11, 2. 1091 (MPE)
- ICES-003 (Class B)
- ACMA/RCM
- IEC 62368-1
- EN 62368-1
- AS/NZS 62368.1
- ErP
- RoHS Compliant
- UKCA

Environmental

- RoHS: Directive 2015/863/EU
- WEEE: Directive 2012/19/EU WEEE

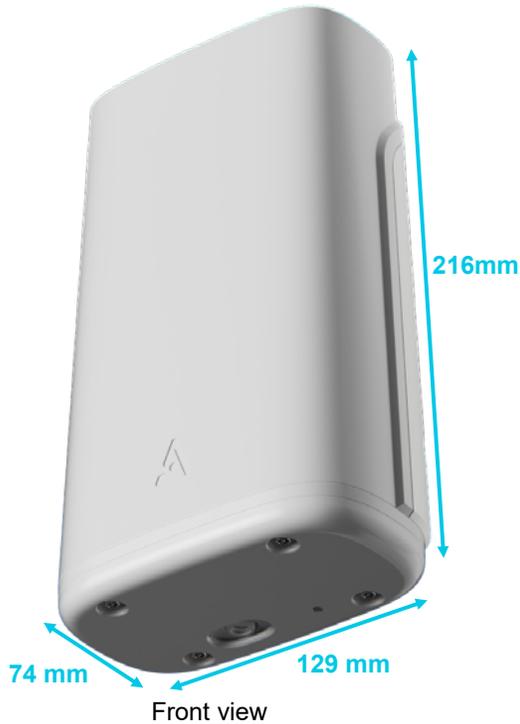
Power supply unit

- 2.5 PoE+PSE devices can include
 - PoE+ Ethernet switches/routers
 - PoE+ injector
 - Type 2 (PoE+) device, defined under IEEE 802.3at-2009. PoE+/Type 2 allows for up to 30W of output power from the PSE. Any PSE device used MUST support Type 2 (30W output power).

Ordering information

Product	region	Wi-Fi country code	Part numbers
SDG-9712o	All	US/ GB/ DE/ AU*	17600082FNS*
Supported accessories			
SDG-9712o Pole-mount kit			17600203F1

*For additional part numbers or a custom quote, please get in touch with sales@adtran.com.



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