

Adtran

Data sheet

# SDG 8622

Wi-Fi 6 tri-band mesh satellite with 2.5GbE WAN and 2.5GbE LAN Ports

## Benefits

- **True multigigabit Wi-Fi 6 tri-band mesh satellite delivering 2.5Gbit/s throughput on the WAN and LAN.**
- **Zero-touch install via intuitive mobile app and QR code.**
- **High-performance tri-band mesh Wi-Fi for multigigabit coverage across the home and business.**
- **Multi-core ARM processor to power next-generation smart home applications.**
- **Advanced H-Pol Omni antennas delivering 360° coverage.**
- **Enhanced service provider software tools and SaaS solutions to deliver an amazing customer experience.**
- **Standards-based support – Intellifi, TR-369 and TR-069.**
- **USB-C powered.**

## Overview

**Adtran's 8600 Series Service Delivery Gateways (SDGs) build upon the successes of their predecessors, enabling even higher speed services and increased Wi-Fi service reach, with better than ever, class-leading subscriber experience enhancements.**

### Carrier-class multigigabit ready

The SDG 8622 is a carrier-class, tri-band Wi-Fi 6 (802.11ax) residential gateway with a 2.5GbE WAN port, making it ideal for delivering reliable, wireless Gigabit or 2+Gbit/s whole-home coverage to homes and small businesses. With three 4x4 antennas (one on the 2.4GHz and two on the 5GHz bands) and support for 160MHz channels, the SDG 8622 works as a mesh satellite or standalone gateway, delivering up to 8.4Gbit/s aggregate throughput. Now, you can support hundreds of smart-home devices and bandwidth-intensive gaming, streaming, AR/VR, and remote working applications for multiple users in the home or business. The SDG 8622 also supports multigigabit on the LAN with a 2.5GbE Ethernet port for multigigabit wired connections.

### Powerful yet power-efficient

With advanced ARM multicore processors, the SDG 8622 boasts 4x more processing power to support multiple 4K streams, low latency gaming applications, and innovative revenue-boosting smart home apps. Intelligent power management, power-efficient 12nm processors, and the use of recyclable materials ensure a sustainable, environmentally friendly Wi-Fi solution. In addition, the elegant, compact design with USB-C powering allows placement on a desk, bookshelf, or tabletop to deliver exceptional Wi-Fi experiences to all users.

### Open platforms unlock innovation

Adtran residential Wi-Fi solutions, including SDG 800, 8600 and 8700 Series, provide operators a choice of market-leading open-source platforms. We support both Intellifi and Plume platforms, allowing you to deliver the right cloud-managed Wi-Fi solution customized to your market and business needs. In addition, we offer support Intellifi, TR-369 and TR-069, enabling remote management of the SDGs.

# SDG 8622

## Product specifications

### Network interfaces

- 2 x 2.5GBASE-T ports (IEEE 802.3bz-2016)
  - 1 x WAN
  - 1 x LAN
- MDI/MDI-X automatically sense
- RJ-45 ports with an integrated link and activity LEDs

### WLAN interfaces

- Compliant with IEEE 802.11b/g/n/ac/ax
- Tri-band radio configuration
  - 2.4GHz 4x4 up to 40MHz
  - 5GHz(L) 4x4 up to 80MHz
  - 5GHz(H) 4x4 up to 160MHz
- 3 x SSIDs per radio
- Integrated internal antenna array
- WPA3 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
- 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
- LTE WAN failover
- TR-069 Remote management
- TR-369 remote management
- TR-181 Device data model

**Features depend on firmware load*

### Ethernet services

- Symmetric 2.5Gbit/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

### USB interface

- 1 x USB-A host interface
  - Compliant with USB 3.0
  - LTE WAN failover

### Console Port

- Compatible with USB to TTL FDTI type serial adapters

### Dimensions

- Size: 7.2" x 4.25" x 4.25" (183mm x 108mm x 108mm) (H x W x D)
- Weight: ~1lb (<500 gm)

### Operating environment

- 41° F – 104° F (5° C – 40° C)
- Humidity: 5% - 85% relative humidity

### Safety and EMI

- FCC certified
- Industry Canada certified
- cULus Listed (UL 62368-1)
- ETSI compliant
- CE certificate
- UKCA certified
- ACMA/RCM certified

### Environmental

- RoHS 6 of 6
- RoHS: Directive 2015/863/EU
- WEEE: Directive 2012/19/EU WEEE

# SDG 8622

## Product specifications

### Power supply unit

- External USB-C power adapter
  - AC Input: 100~240V, 50/60Hz @ 1.0A
  - DC Output: 15 VDC @ 3.0A, USB-C
- Surge Protection: ITU-T K.21 Enhanced compliant (6kV)

### Compliance and Safety Approvals:

- cULus Listed
- FCC: Part 15B
- ICES: ICES-003 Issue 7
- CEC: CEC-400-2019-021 VI
- US DOE: 10CFR Part 430 (EPS) VI
- NRCAN: CSA-C381.1-17 VI
- UKCA: BS EN62368-1; BS/EN55032/35
- CE Mark with NB code: EN6238-1; EN55032/35
- ERP: EN 50563 + A1 (ErP) - External power supply unit
- USB-IF: Power delivery 3.1






# SDG 8622

## Ordering information

| Product | Region | Wi-Fi country code | Part number |
|---|---|---|---|
| **SDG 8622 (SmartOS)** | North America | US | 17600072F1S |
| | United Kingdom | GB | 17600072F2S |
| | European Union | DE | 17600072F3S |
| | Australia/New Zealand | AU | 17600072F4S |
| **SDG 8622 (PlumeOS DHCP)** | North America | US | 17600072F1PD |
| | United Kingdom | GB | 17600072F2PD |
| | European Union | DE | 17600072F3PD |
| | Australia/New Zealand | AU | 17600072F4PD |
| **SDG 8622 (PlumeOS PPPoE)** | North America | US | 17600072F1PP |
| | United Kingdom | GB | 17600072F2PP |
| | European Union | DE | 17600072F3PP |
| | Australia/New Zealand | AU | 17600072F4PP |
| **Supported Accessories** | | | **Part number** |
| SDG Wallmount kit (M) | | | 17600201F1 |

*Note: For additional part numbers or a custom quote, please contact sales@adtran.com.*

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