

Adtran

Data sheet

SDG 8632

Wi-Fi 6E tri-band gateway / mesh satellite with 2.5GbE WAN and LAN ports

Benefits

- **True multigigabit Wi-Fi 6E 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 with support for 6GHz band and 160MHz channels.**
- **Multi-core ARM processor to power next-generation smart home applications.**
- **Advanced H-Pol Omni antennas deliver 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 8632 is a carrier-class, tri-band Wi-Fi 6E (802.11ax) residential gateway with a 2.5GbE WAN port, 6GHz band and 160MHz channels support, making it ideal for 2+Gbit/s whole-home coverage to homes and small businesses. With three 4x4 radios (one each in the 2.4GHz, 5GHz and 6GHz bands), the SDG 8632 works as a primary gateway or mesh satellite, 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 8632 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 8632 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

The Adtran Residential Wi-Fi solutions, including 800 and 8600 Series SDGs, 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 support Intellifi, TR-369 and TR-069, enabling remote management of the SDGs.

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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 4x4 up to 80MHz
  - 6GHz 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

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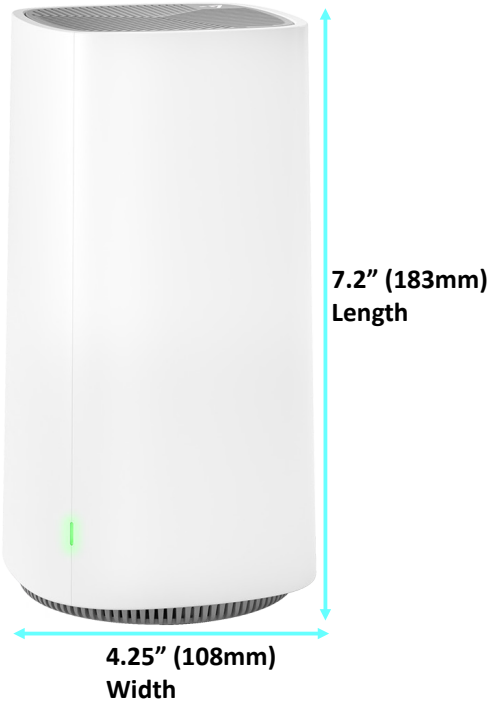
Product specifications

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





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Ordering information

Product	Region	Wi-Fi country code	Part number
SDG 8632 (SmartOS)	North America	US	17600073F1S
	United Kingdom	GB	17600073F2S
	European Union	DE	17600073F3S
	Australia/New Zealand	AU	17600073F4S
SDG 8632 (PlumeOS DHCP)	North America	US	17600073F1PD
	United Kingdom	GB	17600073F2PD
	European Union	DE	17600073F3PD
	Australia/New Zealand	AU	17600073F4PD
SDG 8632 (PlumeOS PPPoE)	North America	US	17600073F1PP
	United Kingdom	GB	17600073F2PP
	European Union	DE	17600073F3PP
	Australia/New Zealand	AU	17600073F4PP
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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