

Data sheet



Wi-Fi 7 tri-band gateway with 10Gbit/s SFP+ WAN and 10GbE LAN ports

# **Benefits**

True 10 Gigabit Wi-Fi 7 tri-band gateway

- Zero-touch install via intuitive mobile app
- High-performance tri-band mesh Wi-Fi with support for 6GHz band and 320MHz channels
- Multi-core ARM processor to power nextgeneration smart home applications.
- Advanced antenna design ensures better rate-reach and 360° coverage
- Open cloud-management support -Intellifi, TR-069 or Plume
- USB-C powered

# **Overview**

Adtran's 8700 Series Wi-Fi 7 Service Delivery Gateways (SDGs) build upon the successes of their predecessors, enabling 10 Gigabit services and Extremely High Throughput (EHT) Wi-Fi 7, with better-than-ever, class-leading subscriber experience enhancements.

# Carrier-class 10 Gigabit gateway

The SDG 8734 is a carrier-class, tri-band Wi-Fi 7 (802.11be) residential gateway with a 10Gbit/s SFP+ WAN port, 6GHz band and 320MHz channel support, making it ideal for 10Gbit/s whole-home coverage to homes and small businesses. With two 4x4 radios each in the 2 4GHz and 5GHz bands and one 4x5 radio on the 6GHz band, the SDG 8734 works as a primary gateway or mesh satellite, delivering up to 19Gbit/s aggregate Wi-Fi throughput. The extra receive chain on the 6GHz band boosts throughput and delivers a 20% greater range. 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 8734 also supports 10 Gigabit on the LAN with a 10GbE port for wired connections.

## Powerful yet power-efficient

The SDG 8700 Series features an advanced ARM multicore CPU, boasting 4x more processing power to support multiple 4K streams, low latency gaming applications, and innovative revenue-boosting smart home apps. Intelligent power management, a 6nm processor, and the use of recyclable materials ensure a sustainable, environmentally friendly Wi-Fi solution. In addition, the elegant, compact design with USB-C powering supports wall-mounting or 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, 8600 and 8700 Series SDGs, provide operators with a choice of market-leading open-source platforms. We support Intellifi and Plume managed Wi-Fi platforms, allowing you to deliver the right cloud-managed Wi-Fi solution customized to your market and business needs. In addition, we offer support for TR-069, enabling remote management of the SDGs.

# **Product specifications**

#### **Network interfaces**

- 1 x 10G SFP+ WAN port
- 1 x 10GBASE-T LAN port
- 3 x 10/100/1000BASE-T LAN ports
- MDI/MDI-X automatically sense
- RJ-45 ports with integrated link and activity LEDs

## **WLAN interfaces**

- Compliant with IEEE 802.11b/g/n/ac/ax/be
- Tri-band radio configuration
  - 2.4GHz 4x4 up to 40MHz
  - 5GHz 4x4 up to 160MHz
  - 6GHz 4x5 up to 320MHz
- 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
- LTE WAN Failover
- TR-069 Remote Management
- TR-181 Device Data Model

#### **Ethernet services**

- Symmetric 10 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

#### **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: 7.75" x 4.8" x 4.8" (197mm x 123mm x 123mm) (H x W x D)
- Weight: 2lbs (924 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

<sup>\*</sup>Features depend on firmware load

# **Environmental**

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

# 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

# **Ordering information**

Product	Region	Wi-Fi Country Code	Part Number
SDG8734 (SmartOS)	North America	US	17600075F1S*
	United Kingdom	GB	17600075F2S*
	European Union	DE	17600075F3S*
	Australia/New Zealand	AU	17600075F4S*
Supported Accessories			Part Number
SDX610 IGbit/s GPON ONT (used with Adtran OLTs)			1442535F3
SDX630 10Gbit/s XGSPON ONT (used with Adtran OLTs)			1287940F1
1G P2P Ethernet SFP up to 10km (used with Adtran OLT-SFP 1442110G1)			1442110G2
1G P2P Ethernet SFP up to 40km (used with Adtran OLT-SFP 1442140G1)			1442140G2
SDG Wallmount kit (L)			17600202F1

<sup>\*</sup>For additional part numbers or a custom quote, please contact sales@adtran.com.









