

Data sheet



SDG 8733v

Wi-Fi 7 tri-band gateway with 10GbE WAN, 10GbE LAN, and voice 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
- Supports VolP
- 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 or TR-069
- 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 with voice

The SDG 8733v is a carrier-class, tri-band Wi-Fi 7 (802.11be) residential gateway with a 10GbE WAN port, 6GHz band and 320MHz channel support, making it ideal for 10Gbits 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 8733v works as a primary gateway, delivering up to 19Gbits/s aggregate Wi-Fi throughput. The extra receive chain on the 6GHz band boosts throughput and delivers a 20% greater range. The SDG 8733v also supports 10 Gigabit on the LAN with a 10GbE port for wired connections. The SDG 8733v includes two voice ports to offer ARPU-enhancing voice services.

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 a choice of market-leading open-source platforms. We support both Intellifi managed Wi-Fi solution and TR-069, based ACS, enabling remote management of the SDGs.

Product specifications

Network interfaces

- 2 x 10GBASE-T ports
 - 1x WAN
 - 1 x LAN
- 3 x 10/100/1000BASE-T LAN ports
- 2 x RJ-11 ports (voice)
- 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

Voice interfaces

- 3-REN, 50V RMS
- RFC 3261 SIPv2
- Full CLASS Feature Set
- ANSI and ETSI POTS
- T.38 Facsimile
- Configurable Dial Plan
- Configurable Country Specific Ring-Back Tones (Frequency and Cadence)

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: ~2lb (924 gm)

Operating environment

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

^{*}Features depend on firmware load

Safety and EMI

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

Environmental

- RoHS: Directive 2015/863/EU
- WEEE: 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
SDG8733v (SmartOS)	North America	US	17600076F1S*
	United Kingdom	GB	17600076F2S*
	European Union	DE	17600076F3S*
	Australia/New Zealand	AU	17600076F4S*
Supported Accessories			
SDG Wallmount kit (L)			17600202F1

^{*}For additional part numbers or a custom quote, please contact sales@adtran.com.





Updated January 8, 2025



