SDG 8610

Wi-Fi 6 dual-band gateway with Combo WAN

Benefits

- True Gigabit Wi-Fi 6 residential gateway
- Ideal for cost-effective Gigabit service delivery
- Enables opportunities in lucrative MDU market
- Delivers 20% extended reach in the critical 5GHz band
- Speeds deployments with an under-5-minute installation process via an intuitive mobile app
- Compact design perfect for desk, bookshelf and wall mount
- Eliminates vendor lock-in with open cloud-management support – Intellifi or TR-069

Overview

Our SDG 8610 is a compact, dual-band mesh Wi-Fi 6 (802.11ax) service delivery gateway (SDG) ideal for expanding mass-market Gigabit services to apartments and small homes at an attractive price point.

The SDG 8610 is a part of the Adtran 8600 Series of SDGs that simplify the delivery of Gigabit and multigigabit services to apartments, MDUs, homes and small businesses.

Expand cost-effective Gigabit connectivity

Our SDG 8610 offers service providers flexible delivery options for Gigabit services, utilizing either fiber (via an SFP ONT) or Ethernet connectivity. Its advanced mesh capabilities make it simple to extend whole-home Gigabit coverage. Additionally, its elegant, compact design allows placement on a desk, bookshelf or wall mount.

Support multiple users and hundreds of smart devices

The SDG 8610 features a unique antenna architecture with 2x2 (2.4GHz) and 2x3 (5GHz) radios, providing 20% greater reach that improves the Wi-Fi quality of experience (QoE). Our SDG 8610 also includes a multicore ARM processor that delivers up to 2Gbit/s of aggregate bandwidth and greater throughput to multiple users and hundreds of smart home devices.

Simple to deploy and operate

The SDG 8610 supports "zero-touch" provisioning and plug-and-play operation. What's more, it offers a choice of powerful cloud-management platforms via Intellifi or TR-069.

Key features

- Flexible WAN connectivity - up to 1Gbit/s (SFP cage or 1GbE port)
- 2x3 MIMO antenna array - delivers 20% greater reach vs. similar 2x2 platforms
- Up to 2Gbit/s aggregate bandwidth
- Multicore ARM processor supports 100s of smart home devices and applications
- Faster, "zero-touch" installs via intuitive mobile app or over-the top (OTT) provisioning

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Product specifications

Network interfaces
- Combo WAN
  - 1 x SFP cage (1Gbit/s)
  - 1 x 10/100/1000BASE-T Ethernet (RJ-45)
- 1 x 10/100/1000BASE-T LAN port (RJ-45)
- MDI/MDI-X automatic sensing
- RJ-45 ports with an integrated link and activity LEDs

WLAN interfaces
- Compliant with IEEE 802.11b/g/n/ac/ax
- Dual-band radio configuration
  - 2.4GHz 2x2 up to 40MHz
  - 5GHz 2x3 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
- 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 1Gbit/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: 1.6" x 5.3" x 4.5" (42mm x 134mm x 115mm) (H x W x D)
- Weight: 0.6lb (285 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: Directive 2015/863/EU
- WEEE: Directive 2012/19/EU WEEE
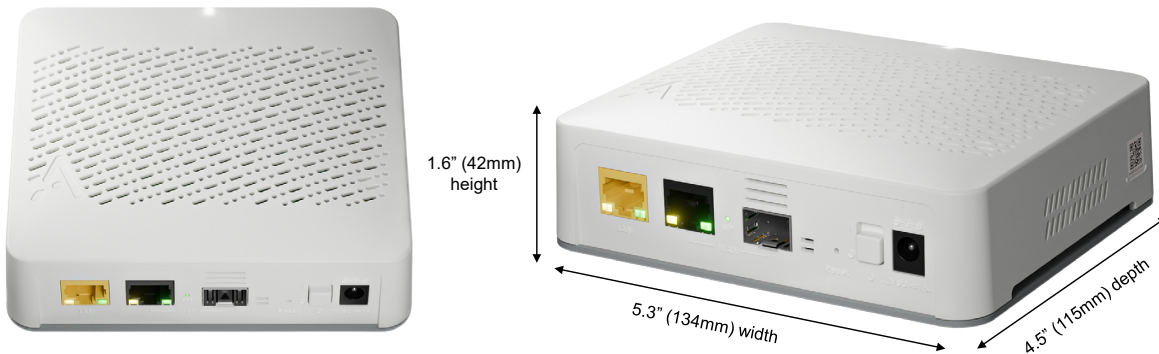
Power supply unit
- External AC/DC power adapter
  - AC input: 100~240V, 50/60Hz
  - DC output: 12 VDC @ 1.5A
- Surge protection: ITU-T K.21 compliant

SDG 8610

Ordering information

Product	Region	Wi-Fi country code	Part number
SDG 8610 (SmartOS)	North America	US	17600078F1S
	United Kingdom	GB	17600078F2S
	European Union	DE	17600078F3S
	Australia/New Zealand	AU	17600078F4S

Supported accessories	Part number
SDX610 1Gbit/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

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

1.6" (42mm) height

5.3" (134mm) width

4.5" (115mm) depth

Adtran