

ADTRAN

842-6E Mesh Extender/RG

Wi-Fi 6E Service Delivery Gateway



Wi-Fi 6E



OpenSync™
Enabled



Elegant
Design



Zero-Touch



Low Power



Multi-Gigabit



Adaptive
Mesh-Enabled

ADTRAN 842-6E Mesh Extender/RG Wi-Fi 6E Service Delivery Gateway



Benefits

- Supports more home device connections via tri-band radio implementation
- Supports multi-gigabit broadband connections wirelessly via Wi-Fi 6E technology and tri-band radio support
- Rapid home installation
- Remote service troubleshooting and home management via TR-069
- Optimised for multi-user homes via OFDMA and MU-MIMO technology
- Supports 2.5Gbps copper wired uplink
- Supports whole home mesh Wi-Fi
- Supports the 2.4GHz, 5GHz and 6GHz spectrums



Wi-Fi 6



Low Power



OpenSync
Enabled



Multi-Gigabit



Elegant Design



Adaptive
Mesh-Enabled



Zero-Touch

Overview

ADTRAN® is building a next-generation platform for smart home services with Wi-Fi 6. Service Delivery Gateways (SDGs) allow more devices to connect and stream simultaneously, without impacting speed or reliability. This is achieved by scheduling multiple streams at once and efficiently packing and scheduling data.

The Solution

These ADTRAN mesh wireless devices act predominantly as whole home Wi-Fi extenders, but can also operate as wireless gateways, supporting Wi-Fi 6 (802.11ax), the latest Wi-Fi standard with four times the data capacity to handle growing home network needs.

Enhanced Multiuser HDTV Quality over Wireless

The ADTRAN mesh wireless residential gateways include built-in tri-band 802.11ax radios. The tri-band radio implementation comes with OFDMA and MU-MIMO to deliver wired-equivalent performance, supporting full 4K UHD video.

To take greater advantage of the Wi-Fi 6 multi-gigabit speeds, the Wi-Fi 6 variants of the ADTRAN SDGs support 2.5GE copper uplinks.

Smarter, Consistent Whole Home Wi-Fi

These ADTRAN mesh wireless devices increase capacity and effective throughput in the home by forming a smart, self-organising, adaptable network. This ensures consistent coverage anywhere in the home, office, or in outdoor spaces.

OpenSync Integrated

These devices include OpenSync integration, a cloud-agnostic, open-source software for delivery, curation, and management of services for the smart home.

A Better Look for Better Performance

The device location within the home is the most important indicator of Wi-Fi performance. Getting the best signal means not placing it in a corner, closet, or in a shelving unit behind a glass picture frame. The ADTRAN SDG Series gateways and access points offer an elegant, modern design supported by multiple mounting options enabling them to blend into a home's décor.

Product Specifications

Ethernet Interfaces

- 2 x 2.5GBASE-T Ports with RJ-45 Connectors
- Ethernet Port Auto Negotiation or Manual Configuration
- MDI/MDI-X Automatic Sense

Ethernet Services

- 802.1D Bridging
- 802.1x Authentication
- Virtual Switch Based on 802.1q VLAN
- VLAN Tagging/Untagging 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
- Broadcast/Multicast Rate Limiting

Gateway Features

- WAN Connection
 - Point-to-Point Protocol over Ethernet (PPPoE)
 - Dynamic Host Configuration Protocol (DHCP)
- DHCP Server for LAN Devices
- DNS Relay
- Network Address Translation (NAT)/ Network Address Port Translation (NAPT)
- Port Forwarding
- Static Routing
- Access Control List (ACL)
- VPN Pass Thru for Point to Point Tunneling Protocol (PPTP), Layer 2 Tunneling Protocol (L2TP) and IP Security Protocol (IPSec)
- Firewall
- Application Layer Gateway (ALG)
- Demilitarized Zone (DMZ)
- Dynamic Domain Name Server (DDNS)
- Network Time Protocol (NTP)

- Universal Plug and Play (uPnP)
- IGMP Proxy
- IPv6
 - Stateless Address Autoconfiguration (SLAAC)
 - DHCPv6
 - PPPoEv6
 - DNSv6

WLAN Interface

- Compliant with IEEE 802.11 b/g/n/ac/ax
- 160Mhz channel
- Dynamic Frequency Selection
- Multi-region support
- 2.4 GHz, 5.0GHz and 6.0 GHz
- Tri Band Radios
 - 2.4 GHz 2x2
 - 5.0 GHz 2x2
 - 6.0 GHz 4x4
- WPA3 Support
- Bluetooth 5.0
- Push Button WPS

Dimensions

- 168 x 98 x 206 mm (Height / Width (Base)/ Depth)

Power Supply

- +12V (Feed via External AC/DC Adapter)
- Power Consumption: Less than 30W

Working Environment

- Temperature: 41° F – 104° F (5° C – 40° C)
- Humidity: 5% – 85% Relative Humidity

Environmental Directive

- RoHS 6 of 6

Product Specifications

LEDs

- Multifunction RGBW
- 2.4GHz
- 5GHz
- 6GHz
- WPS
- Ethernet link/activity

Safety and EMI

- CE Certificate
- FCC / Industry Canada Certified, UL Listed
- ETL Intertek Listed (UL 62368-1)
- CE/UKCA mark
- DFS certified
- ACMA/RCM compliant

Ordering Information

Model	Region	Part No.
SDG 842-6E	North & Central America	17600145F1
	United Kingdom	17600145F2
	European Union	17600145F3
	Australia/New Zealand	17600145F4

1617600145F1-8B

July Copyright © 2021 ADTRAN, Inc. All rights reserved.
ADTRAN believes the information in this publication to be accurate as of publication date, and is not responsible for error. Specifications subject to change without notice. ADTRAN and the other trademarks listed at www.adtran.com/trademarks are registered trademarks of ADTRAN, Inc. or its affiliates in various countries. All other trademarks mentioned in this document are the property of their respective owners.

ADTRAN warranty duration and entitlements vary by product and geography. For specific warranty information, visit www.adtran.com/warranty

ADTRAN products may be subject to U.S. export controls and other trade restrictions. Any export, re-export, or transfer of the products contrary to law is prohibited. For more information regarding exportation of ADTRAN items (e.g. commodities, technology, software), please visit www.adtran.com/exporthicense.

ADTRAN, Inc.
901 Explorer Boulevard
Huntsville, AL 35806

General Information
+1 256 963 8000
www.adtran.com/contactus

**Headquarters—EMEA
ADTRAN GmbH**
sales.cewe@adtran.com

South Europe
sales.southeurope@adtran.com

Middle East and Africa
sales.mea@adtran.com

Australia/New Zealand
sales.australia@adtran.com