

SDG 800 Series

841-t6

Wi-Fi 6 Mesh Extender/RG



Wi-Fi 6

Open Sync™
Enabled

Zero-Touch



Low Power

Adaptive
Mesh-Enabled

Benefits

- Extend Multi-Gigabit Connectivity via Wi-Fi 6 Technology
- High-Performance Tri-Band Mesh for Coverage Across the Home and Property
- 4x4 Simultaneous Streams with MU-MIMO for Lag-Free Gaming and 4K Streaming
- H-Pol Omni Antennas Cut RF Interference Delivering 360 Coverage
- “Zero-touch” Self-Install and Management via Intuitive App
- AI-Drive Adaptive Mesh Delivering Consistent, High-Performance Connectivity to All Users and Devices
- OpenSync-Enabled Unlocking Service Innovation

Overview

Adtran is building a next-generation platform for smart home services with Wi-Fi 6. The Adtran 841-t6 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

The 841-t6 SDG acts as a wireless mesh extender, working in conjunction with other OpenSync-enabled Adtran 800 Series SDGs to extend wireless connectivity seamlessly across the home and property. The 841-t6 SDG includes a 2.5GE WAN port, allowing it to operate as a standalone multi-gigabit Ethernet RG delivering high-performance Wi-Fi in homes or apartments.

Enhanced Multiuser HDTV Quality over Wireless

These mesh wireless residential gateways include built-in tri-band 802.11ax radios, OFDMA, and MU-MIMO to deliver wired-equivalent performance, supporting 4K and 8K video streaming, and cloud gaming.

To take greater advantage of the Wi-Fi 6 multi-gigabit speeds, the 841-t6 SDGs support 2.5GE uplinks.

Smarter, Consistent Whole Home Wi-Fi

The Adtran 841-t6 SDGs increase capacity and effective throughput in the home by forming a smart, self-organizing, adaptable network. This ensures consistent coverage anywhere in the home, office, or outdoor spaces.

OpenSync Integrated

The Adtran 841-t6 SDGs include OpenSync integration, a cloud-agnostic, open-source software for delivery, curation, and management of services for smart home applications.

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 the device in a corner, closet, or on a shelving unit behind a glass picture frame. The Adtran 800 Series SDGs and access points offer an elegant, modern design supported by multiple mounting options allowing them to blend into home décor.

841-t6

Product Specifications

Ethernet Interfaces

- 1 x 2.5GBASE-T Ports with RJ-45 Connectors
- 1 x 10/100/1000BASE-T Ports with RJ-45 Connectors
- Ethernet Port Auto Negotiation or Manual Configuration
- MDI/MDI-X Automatic Sensing

Ethernet Services

- 802.1D Bridging
- 802.1x Authentication
- 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
- 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 and 5.0 GHz
- Tri Band Radios
 - 2.4 GHz 2x2
 - 5.0 GHz 2x2
 - 5.0 GHz 4x4
- WPA3 Support
- Bluetooth 5.0
- Push Button WPS

Dimensions

- 6.6 in x 3.9 in x 8.1 in (168 mm x 98 mm x 206 mm)
(Height x Width x Depth)
- 1.3 lbs (584 gm)

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

LEDs

- Multifunction RGBW
- 2.4GHz
- 5GHz
- 5GHz
- 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

Equipment	Region	Part No.
SDG 845-t6	North & Central America	17600030F1
	United Kingdom	17600030F2
	European Union	17600030F3
	Australia/New Zealand	17600030F4



**Adtran Corporate
Headquarters**
901 Explorer Boulevard
Huntsville, AL 35806
USA
adtran.com
sales@adtran.com

Adtran Europe Limited
Building 2200 Basing View
Basingstoke RG-21 4EQ, UK
contact@adtran.com

Adtran GmbH
Jean-Monnet-Straße 4,
10557 Berlin, Germany
kontakt@adtran.com

**Adtran Networks Pty.
Limited**
L5 330 Collins Street
Melbourne, Victoria, 3000
Australia
australia@adtran.com

617600030F1-8D

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