

Adtran

Data sheet

SDG 800 Series

841-t6

Tri-Band Wi-Fi 6 Mesh Satellite/Hub

Wi-Fi 6 | Adaptive mesh-enabled | Low power | Multi-gigabit

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**
- **AI-Driven, Mesh Wi-Fi Delivering Consistent, High-Performance Connectivity to All Users and Devices**

Overview

The 841-t6 Wi-Fi 6 Service Delivery Gateway (SDG) is a carrier-class, 802.11ax Ethernet residential gateway/mesh satellite with tri-band mesh, and 2.5GE WAN/LAN port. It is built to extend fiber and multi-gigabit performance for buffer-free 4K/8K streaming and gaming, connect 100s of smart home devices and deliver consistent coverage across the home or business.

Smarter, Consistent Whole Home Wi-Fi

The Adtran 841-t6 tri-band mesh SDGs include a dedicated 4x4 radio for backhaul that increases capacity, lowers latency, and improves coverage across the home. In combination with innovative H-Pol Omni antennas, the 841-t6 delivers 360° coverage anywhere in the home, office, or in outdoor spaces.

Carrier-Class Features

The Adtran 841-t6 is designed for service providers that require carrier-class performance, reliability, and firmware flexibility in their broadband access gateways. Native support for IPv6, multicast traffic handling for IPTV, dynamic Quality of Service (QoS), and FCC Speed Test are standard features. Out-of-the-box, the Adtran 841-t6 offers outstanding interoperability with industry-leading TR-069 remote management systems. The 841-t6 includes a 2.5GE WAN/LAN interface delivering multi-gigabit wired and wireless throughput. 2.5GE uplinks.

Speed to Burn and Room to Grow

The 841-t6 boasts a Multi-core ARM® Cortex processor with the power to route IPv4/v6 traffic up to 2.5Gbps bi-directionally, with plenty of processing power left over for value-added applications, giving service providers unlimited feature, pricing, and service delivery options.

Performance Personified

Getting the best Wi-Fi does not mean placing it in a corner closet or in a shelving unit behind a glass picture frame. The Adtran 800 series SDGs offer an innovative space-age design that looks great the desk or shelf while delivering an exceptional Wi-Fi experience to all users and devices.

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 (Softward Dependent)
- MDI/MDI-X Automatic Sensing

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
- Dynamic Frequency Selection
- Multi-Region Support
- Tri Band Radios
  - 2.4 GHz 2x2 up to 40MHz
  - 5.0 GHz 2x2 up to 80MHz
  - 5.0 GHz 4x4 up to 80MHz
- WPA3 Support
- 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

LEDs

- Multifunction RGBW
  - 2.4GHz
  - 5GHz-1
  - 5GHz-2
  - 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
- RoHS 6 of 6

841-t6

Ordering information

Equipment	Region	Part number
SDG 841-t6	North & Central America	17600030F1S
	United Kingdom	17600030F2S
	European Union	17600030F3S
	Australia/New Zealand	17600030F4S



Updated November 11, 2026

Copyright © 2026 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.