



831-t5

Wi-Fi 5 Tri-band Mesh Extender/RG



Open



Zero-Touch

Adaptive
Mesh-Enabled

Gigabit

Benefits

- Extend Gigabit Connectivity via Wi-Fi 5 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 5. The 831-t5 Service Delivery Gateway (SDG) allows 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 831-t5 acts as a wireless mesh extender working in conjunction with other OpenSync-enabled Adtran 800 Series SDGs, to extend wireless connectivity across the home and property. The 831-t5 can also operate as a standalone Ethernet RG delivering high-performance Wi-Fi in small homes or apartments.

Enhanced Multiuser HDTV Quality Over Wireless

The tri-band radio implementation comes with MU-MIMO to deliver wired-equivalent performance, supporting full 4K UHD video.

To take greater advantage of Wi-Fi 5 multigigabit speeds, the 831-t5 supports gigabit Ethernet copper uplinks.

Smarter, Consistent Whole Home Wi-Fi

The Adtran 831-t5 increases capacity and effective throughput in the home by forming a smart, self-organizing adaptable network. This ensures consistent coverage throughout the home, office, or outdoor spaces.

OpenSync Integrated.

The Adtran 831-t5 includes OpenSync integration, a cloud-agnostic, open-source software for delivery, curation, and management of services for the smart home.

Performance Personalified

The device location within the home is the most important indicator of Wi-Fi performance. Getting the best signal means not placing the SDG in a corner, closet, or in a shelving unit behind a glass picture frame. The Adtran 800 Series SDGs offer an elegant, modern design supported by multiple mounting options enabling them to blend into a home's décor.

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Product Specifications

Ethernet Interfaces

- 1 x 10/100/1000BASE-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
- Dynamic Frequency Selection
- Multiregion 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
- 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 (Base) 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 831-t5	North & Central America	17600031F1
	United Kingdom	17600031F2
	European Union	17600031F3
	Australia/New Zealand	17600031F4



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