

SDG 800 Series

854-v6

Dual-Band Wi-Fi 6 Mesh Ethernet Gateway with 2.5GE Port and Voice Support



Wi-Fi 6

AI-Driven,
Mesh Wi-Fi

Low Power

Multi-
Gigabit

VoIP

OpenSync™
Enabled

Benefits

- True Multi-Gigabit Wi-Fi 6 Ethernet Gateway Delivering Up to 3.6 Gbps Capacity
- High-Performance Dual-Band Mesh Wi-Fi for Coverage Across the Home and Property
- 4x4 Simultaneous Streams with MU-MIMO for Lag Free Gaming and 4K Streaming
- H-Pol Omni Antennas Delivering 360 Coverage
- “Zero-Touch” Self-Install and Management via Intuitive App
- AI-Driven, Adaptive Mesh Wi-Fi Delivering Consistent, High-Performance Connectivity to All Users and Devices
- Integrated Voice Ports for VoIP Services
- OpenSync-Enabled Unlocking Service Innovation

Overview

The **854-v6 Wi-Fi 6 Service Delivery Gateway (SDG)** is a carrier-class, 802.11ax Ethernet residential gateway with Dual-band Mesh, 2.5GE WAN/LAN port, integrated voice ports, and OpenSync support. 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. The Adtran 854-v6 is part of Adtran’s next-generation 800 series Ethernet Gateways and Mesh Satellites that enable a consistent multi-user, multi-gigabit experience across the home and property – enabling a transformational Wi-Fi experience.

Smarter, Consistent Whole Home Wi-Fi

The Adtran 854-v6 Dual-Band SDG is a true multi-gigabit Ethernet gateway delivering up to 3.6Gbps aggregate throughput for access and backhaul. The SDG 854-v6 includes two integrated voice ports to support VoIP services. Combined with innovative H-Pol Omni antennas, the 854-v6 SDG delivers 360° coverage anywhere in the home, office, or outdoor spaces.

Carrier-Class Features

The Adtran 854-v6 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 854-v6 SDG offers outstanding interoperability with industry-leading TR-069 remote management systems. The 854-v6 includes a combo 2.5GE WAN/LAN interface delivering multi-gigabit wired and wireless throughput.

Speed to Burn and Room to Grow

The 854-v6 boasts a Multi-core ARM® Cortex processor with the power to route IPv4/v6 traffic up to 3.6Gbps 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 a shelving unit behind a glass picture frame. The Adtran 800 series SDGs offer an innovative space-age design that looks great on the desk or shelf while delivering an exceptional Wi-Fi experience to all users and devices.

OpenSync Integrated

The Adtran 854-v6 SDGs include OpenSync integration, a cloud-agnostic, open-source software. OpenSync simplifies delivery, curation, and management of a suite of ARPU-enhancing smart home applications.

854-v6

Product Specifications

Ethernet Interfaces

- 1 x 2.5GBASE-T Ports with RJ-45 Connectors
- 4 x 10/100/1000BASE-T Ports with RJ-45 Connectors
- 1 x 2.5GE SFP+ Port
- Ethernet Port Auto-Negotiation or Manual Configuration (Software Dependent)
- MDI/MDI-X Automatic Sensing
- 2 x RJ-11 Voice Ports

Gateway Features

- Multiple WAN Services
 - Point-to-Point Protocol over Ethernet (PPPoE)
 - Dynamic Host Configuration Protocol (DHCP)
- DHCP Server for LAN Devices
- 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

Voice Interfaces

- 3-REN, 50V RMS
- RFC 3261 SIPv2
- Full CLASS Feature Set
- ANSI and ETSI POTS
- T.38 Facsimile
- Configurable Dial Plan
- Configurable Country Specific Ring-Back Tones (Frequency and Cadence)

WLAN Interface

- Compliant with IEEE 802.11 b/g/n/ac/ax
- Dynamic Frequency Selection
- Multi-Region Support
- 2.4 GHz and 5.0 GHz
- Dual-Band Radios
 - 2.4 GHz 4x4
 - 5.0 GHz 4x4
- WPA2 Support
- Bluetooth 5.0
- Push Button WPS

USB Interface

- 1 USB Host Interface
- Compliant to USB 3.0

Dimensions

- 9.8 in x 3.5 in x 7.7 in
(249 mm x 90 mm x 195 mm) (H x W x D)
- Weight: 2.6 lbs (1176 gm)

Power Supply

- External AC/DC power adapter
- AC Input: 100~240 VAC @ 50/60Hz

Working Environment

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

LEDs

- Multifunction RGBW
- 2.4GHz
- 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
- RoHS 6 of 6

Ordering Information

Equipment	Region	Part No.
SDG 854-v6	North & Central America	17600028F1P
	United Kingdom	17600028F2P
	European Union	17600028F3P
	Australia/New Zealand	17600028F4P





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