ADTRAN 825-v6 Home Gateway Unit User Guide

Contents

ADTRAN 825-v6 Home Gateway Unit User Guide

May 2021
617600139-13A

825-v6 Home Gateway Unit
Wi-Fi 6 XGS-PON HGU

P/N: 17600139F1

Overview

WARNING!

Read all warning, cautions, notes and installation instructions before installing or servicing this equipment.

This quick start describes how to install ADTRAN's 825-v6 Home Gateway Unit.

The 825-v6 WiFi 6 XGS-PON HGU is an indoor gateway that leverages XGS-PON technology for delivering premium multi-Gigabit services.

Figure 1 illustrates the front and back of the 825-v6 gateway.

Figure 1. Front and Back of the 825-v6 Gateway

WARNING!

WARNING indicates a hazard which, if not avoided, could result in death, injury or serious property damage.

CAUTION!

CAUTION indicates a hazard which, if not avoided, could result in service interruption, damage to the equipment, or minor property damage.

NOTE

NOTES inform the user of additional, but important, information or features.

Features

The features of the 825-v6 gateway include the following:

- XGSPON network uplink
- Subscriber interfaces
    - 2.5 Gigabit Ethernet (RJ-45) interface
    - 4x Gigabit Ethernet (RJ-45) interfaces
    - 3×3 802.11ax @2.4GHz
    - 4×4 802.11ax @5GHz
    - 2x voice (RJ-11) interfaces
- Remote activation and deactivation
- Remote firmware upgrades
- Remote OMCI management as per ITU-T G.988

Installing the 825-v6 Gateway

The following are guidelines for basic installation of the 825-v6.

NOTE

Refer to the national, state and local electrical codes for the requirements for power, grounding, wiring, and installation methods.

CAUTION!

The product is intended for indoor use only. Ethernet, POTS cables, and attached equipment are intended for use within the same building with equipotential bonding, and not intended to be placed in separate buildings or structures. Failure to deploy as described could result in permanent damage from lightning or other electrical events and voids the warranty. Furthermore, all connections from outside of the building, such as old POTS wiring, must be disconnected prior to use.

Package Contents

- ADTRAN's 825-v6 WiFi 6 XGS-PON gateway
- 12V DC power adapter

Prior to Installation

Before installing the equipment, inspect the gateway. If damage has occurred during shipping, file a claim with the carrier, and then contact ADTRAN Customer Support. For more information, refer to the product warranty available online at **https://adtran/wp_support_warranty**.

Required Tools

Standard technician tools and, if installing the gateway on a wall, a #2 Phillips-head screwdriver, are required for installing the 825-v6.

Mounting Options

There are two options to install the 825-v6: desktop and wall mount. Be sure to route and secure the fiber and cables in a manner that will prevent damage. These options are described below.

Desktop Installation

The 825-v6 can be placed on a desk or table. The following table shows the recommended minimum distance (in feet and meters) between the gateway and household appliances to reduce interference.

Household Appliance	**Recommended Minimum Distance (in feet and meters)**
Microwave ovens	30 feet / 9 meters
Baby monitor – analog	20 feet / 6 meters
Baby monitor – digital	40 feet / 12 meters
Cordless phone – analog	20 feet / 6 meters
Cordless phone – digital	30 feet / 9 meters
Bluetooth devices	20 feet / 6 meters
ZigBee	20 feet / 6 meters

⚠ **WARNING!**

Ensure that the 825-v6 does not come in contact with water or other liquids.

⚠ **CAUTION!**

Ensure that the 825-v6 is not located in direct sunlight or next to any thermal obstructions.

Wall Mount Installation

The 825-v6 can be mounted on a wall. Wall Mount Kit (17600192F1) can be ordered for mounting the 825-v6. Instructions are provided in the related Quick Start Guide (617600192F1-13A).

Connecting the 825-v6 Gateway

Figure 2 illustrates the installation (connection) options for the 825-v6 gateway.

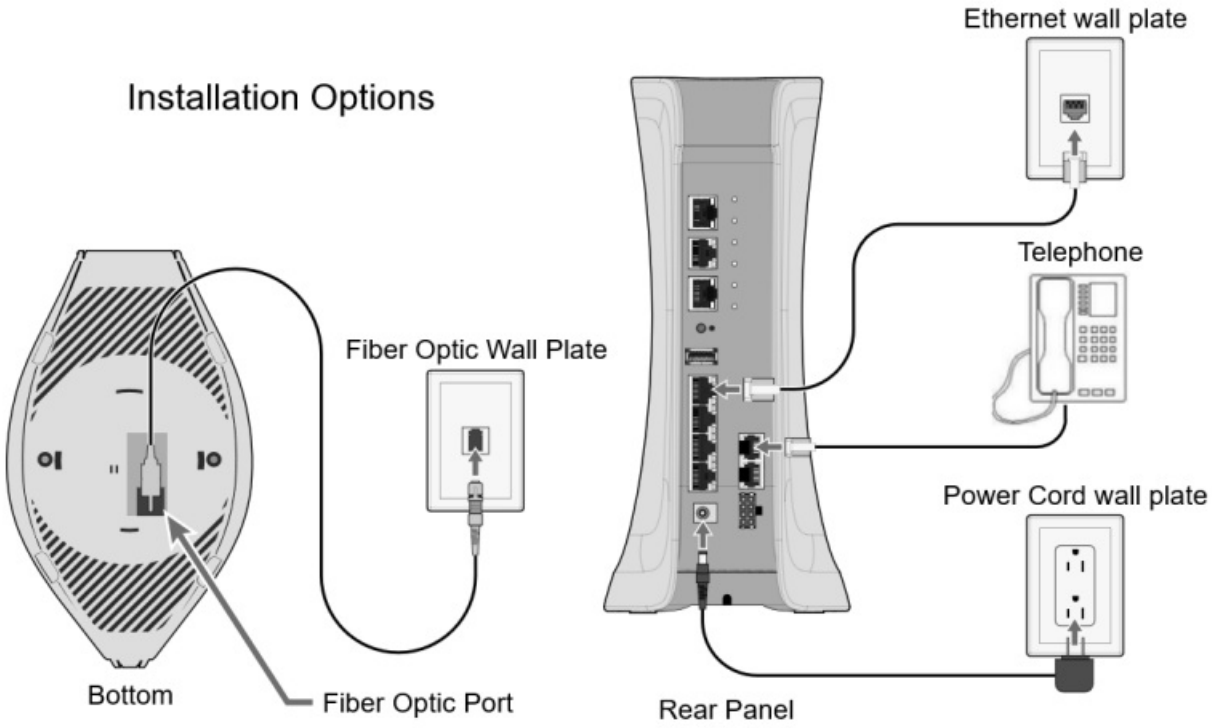

Figure 2. 825-v6 Gateway Installation Options

The following subscriber connections are available on the rear of the 825-v6:

- 4x Gigabit Ethernet (RJ-45 Connectors) – **LAN 1- 4** ports
- 1x 2.5 Gigabit Ethernet port (RJ-45 Connector) – **2.5GbE** port
- 3×3 802.11ax @ 2.4GHz
- 4×4 802.11ax @ 5GHz
- 2x Telephone (RJ-11 Connectors) – **Tel 1** and **Tel 2** ports
- 1x USB 3.0 (Type A Connector) – SS port

To connect the subscriber interfaces, refer to ***Figure 2*** and complete the following:

1. For an Ethernet connection, insert a Category 5E (or better) RJ-45 cable into one of the LAN ports (labeled **LAN 1- 4**) or the 2.5 Gigabit Ethernet port (**2.5GbE**) until there is an audible “click”.
2. For a Voice connection, insert an RJ-11 cable into one of the telephone ports labeled (**Tel 1** or **Tel 2**) until there is an audible “click”.

Connecting the Power Supply

1. Connect the end of the power adapter to the **Power** port on the rear panel of the gateway
2. Plug other end of the power adapter into the wall outlet.
3. Confirm that the power is connected properly. The **Power** LED should be lit on the front of the gateway.

NOTE

*Alternately, the device may be powered by a supported third-party UPS which may be connected via 7-pin molex connector, labeled **UPS**.*

Resetting the Gateway

A reset button is available if the 825-v6 needs to be rebooted. To reboot the 825-v6, press the **Reset** button on the rear panel of the gateway for **5 seconds** *or less*. To reset the device to custom defaults, press the **Reset** button for **5 seconds** *or more*.

Understanding the Status LEDs

The LEDs on the back panel of the 825-v6 gateway enable you to monitor the device status. This section describes the three types of LEDs available on the 825-v6 gateway. See ***Figure 3*** for details.

Figure 3. Status LEDs

2.4 GHz / 5 GHz Status LEDs

The **2.4 GHz** and **5 GHz** status LEDs indicate the state of the wireless connections on the gateway.

LED	Color	State	Description
2.4 GHz **5 GHz**	Green	On	Wi-Fi radio is UP.
		Flashing	Wi-Fi radio is transferring data.
	None	Off	Wi-Fi connection is DOWN.

WPS Status LED

The **WPS** status LED indicates the status of WPS (Wi-Fi protected setup).

LED	Color	State	Description
WPS	Green	On	WPS is enabled.
		Flashing	WPS is passing traffic.
	None	Off	WPS is not active.

Tel 1/2 Status LED

The **Tel 1/2** status LED indicate the state of the phone line ports.

LED	Color	State	Description
Tel 1/2	Green	On	Telephone is off-hook; a call is in progress.
		Flashing	Telephone is off-hook.

Product Specifications

Electrical

- Power is provided by a 12V DC Power Adapter that is included with the 825-v6. The power adapter operates from a power source of 100 to 240V AC, 50 – 60 Hz. The nominal output is 12V DC +\–5% with a maximum current rating of 4.0 Amps. For US and Canadian applications, a UL Listed limited power source (LPS) is required. For deployment outside of North America, an LPS specifically approved for that country, such as a CE Mark, is required.

NOTE

It is strongly suggested that the power supply (a 5-foot (1.5 m) power cord) included with the 825-v6 be connected to a surge suppressor device which can have its own extension cable. The surge protection device should provide L-N, L-G, and N-G protection. It is also recommended that the device contains a visual 'GOOD' indicator.

Environment

- Operating Temperature: 32°F to 104°F (0°C to 40°C)
- Storage Temperature: -40°F to 158°F (-40°C to 70°C)
- Relative Humidity: 10 to 95 percent, non-condensing

NOTE

Changes or modifications not expressly approved by ADTRAN will void the warranty.

Safety and Regulatory

This product meets the following compliance requirements:

- UL /cUL Listed
- FCC Part 15, Class B
- ICES-003 (Class B)
- IEC 62368-1
- EN 62368-1, AS/NZS 60950.1
- RoHS Compliant

This equipment contains no parts that can be serviced by the user.

Refer to the Safety and Regulator Notice for this product (P/N: 617600139F1-17) for detailed safety and regulatory information.

Documentation for ADTRAN Network Solutions products is available for viewing and download directly from the ADTRAN Support Community website.
Go to: **https://supportcommunity.adtran.com**

ADTRAN offers training courses on our products, including customized training and courses taught at our facilities or at customer sites.
For inquiries, go to: **http://adtran.com/training**

Access additional safety information and product documentation using the QR code or website.

https://supportcommunity.adtran.com

Warranty: ADTRAN will replace or repair this product within the warranty period if it does not meet its published specifications or fails while in service. Warranty information can be found online at **www.adtran.com/warranty**.

ADTRAN CUSTOMER CARE:

From within the U.S. 1.888.423.8726
From outside the U.S. +1 256.963.8716

PRICING AND AVAILABILITY 1.800.827.0807

6176D0139F1-13A

Documents / Resources

	**ADTRAN ADTRAN 825-v6 Home Gateway Unit** [pdf] User Guide ADTRAN, 825-v6, Home Gateway Unit, Wi-Fi 6, XGS-PON, HGU