

Overview

**WARNING!**

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

**ATTENTION!**

Lisez tous les avertissements et mises en garde avant l'installation de cet équipement ou la réalisation de toute opération de maintenance.

This quick start describes how to install ADTRAN's 814-v6 Home Gateway Unit.

The 814-v6 Wi-Fi 6 GPON HGU is an indoor gateway that leverages GPON technology for delivering premium, multi-Gigabit services via an integrated GPON WAN and Dual-band Wi-Fi 6, along with Voice services.

- ["Installing the 814-v6 Gateway"](#) on page 2
- ["Understanding the Status LEDs"](#) on page 5
- ["Safety and Regulatory"](#) on page 6

[Figure 1](#) illustrates the front and back of the 814-v6 gateway.

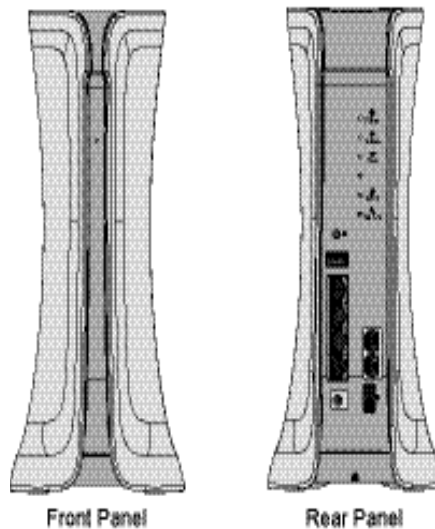


Figure 1. Front and Back of the 814-v6 Gateway

**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 814-v6 gateway include the following:

- SC/APC connector (Standard Connector/Angled Physical Contact) for GPON/Active Ethernet network uplink
- Subscriber interfaces
 - ◆ 4x Gigabit Ethernet (RJ-45) interfaces
 - ◆ 3x3 802.11ax @ 2.4GHz
 - ◆ 4x4 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 814-v6 Gateway

The following are guidelines for basic installation of the 814-v6.

	NOTE <hr/> <p>Refer to the national, state and local electrical codes for the requirements for power, grounding, wiring, and installation methods.</p>
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	CAUTION! <hr/> <p>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.</p>
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Package Contents

- ADTRAN's 814-v6 GPON 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 814-v6.

Mounting Options

There are two options to install the 814-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 814-v6 can be placed on a desk or table. The following table shows the recommended minimum distance (in feet and meters) between ADTRAN equipment 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

Household Appliance	Recommended Minimum Distance (in feet and meters)
Cordless phone – digital	30 feet / 9 meters
Bluetooth devices	20 feet / 6 meters
ZigBee	20 feet / 6 meters



WARNING!

Ensure that the 814-v6 does not come in contact with water or other liquids.



CAUTION!

Ensure that the 814-v6 is not located in direct sunlight or next to any thermal obstructions.

Wall Mount Installation

The 814-v6 can be mounted on a wall. Wall Mount Kit (17600192F1) can be ordered for mounting the 814-v6. Instructions are provided in the related Quick Start Guide (617600192F1-13A).

Connecting the 814-v6 Gateway

Figure 2 illustrates the installation (connection) options for the 814-v6 gateway.

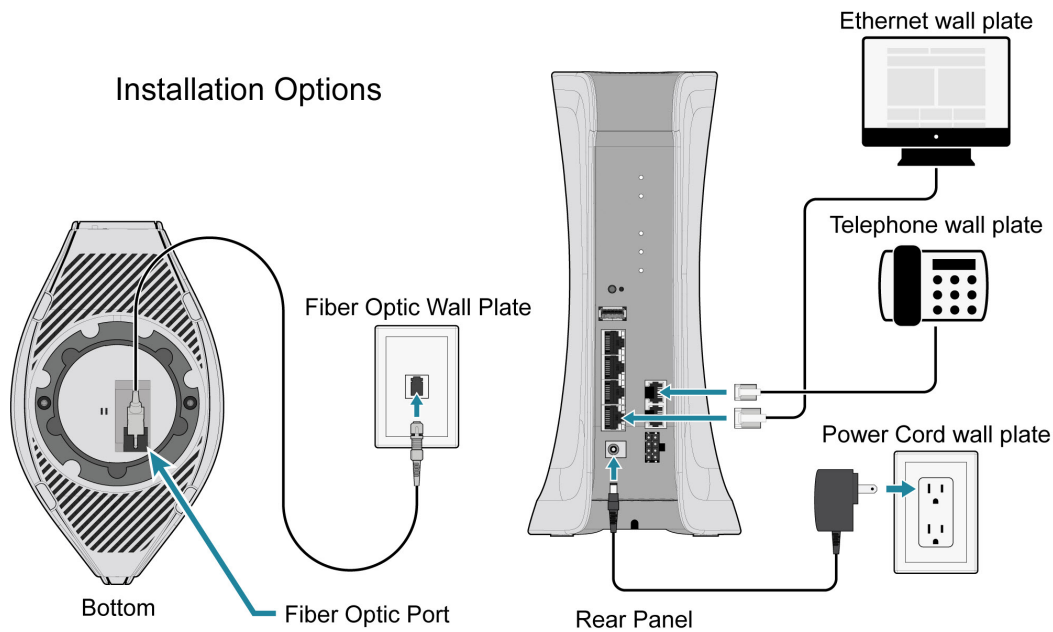


Figure 2. 814-v6 Gateway Installation Options

The following subscriber connections are available on the rear of the 814-v6:

- 4x Gigabit Ethernet (RJ-45 Connectors) – LAN 1-4 ports
- 2x Telephone (RJ-11 Connectors) – Tel 1 and Tel 2 ports
- 1x USB 3.0 (Type A Connector) - 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) 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”.

3. Before connecting to the service provider interface, clean the optical Interfaces of the SC/APC connectors.



CAUTION!

The following safety actions are recommended:

- Do not allow disconnected optical connectors to touch surrounding unrelated surfaces and do not touch optical surfaces for any reason other than performing the cleaning process.
- Do not use compressed air to clean optical connectors.
- Clean the optical surfaces as follows:
 - ◆ Use a fiberscope or videoscope to verify proper cleaning of connectors prior to connecting components together.
 - ◆ Use pure alcohol (reagent grade, 99.5% pure) when cleaning the endface of the connectors. The alcohol can be applied with either laboratory grade lint-free tissues or with pre-moistened optical grade wipes.
 - ◆ Use microporous fabric spiral wrapped cleaning tips to clean bulkhead ferrules.
- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



ATTENTION!

L'utilisation des commandes ou réglages ou l'exécution des procédures autres que celles spécifiées dans les présentes exigences peuvent être la cause d'une exposition à un rayonnement dangereux.



NOTE

This product contains a Class 1 Laser module that complies with FDA 21 CFR 1040.10, 1040.11 and IEC 60825-1.

4. Insert the fiber cable into the **WAN** port on the bottom of the gateway.



CAUTION!

To prevent breaking the fiber, do not exceed the fiber bend radius of 3.5 in (8.9 cm).

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 814-v6 needs to be rebooted. To reboot the 814-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 814-v6 gateway enable you to monitor the device status. This section describes the four types of LEDs available on the 814-v6 gateway. See *Figure 3* for details.



Figure 3. Status LEDs

Fiber Status LED

The **Fiber** status LED indicates if the device is powered up correctly.

LED	Color	State	Description
Fiber	Green	On	Fiber optic connection is UP.
		Flashing	Fiber optic connection is discovering or activating the ONT on the PON.
	None	Off	Fiber optic connection is DOWN.

2.4GHz / 5GHz Status LEDs

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

LED	Color	State	Description
2.4GHz / 5GHz	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.
	None	Off	Telephone is on-hook.

Product Specifications

Electrical

Power is provided by a 12V DC power adapter that is included with the 814-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 minimum 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 814-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 safety and regulatory requirements:

- UL/cUL Safety Listed
- IEC 62368-1
- EN 62368-1, AS/NZS 60950.1
- IEC 60825-1: 2014; CLASS 1 LASER PRODUCT
- 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: 617600132F1-17) for detailed safety and regulatory information.

Consultez l'avis sur la sécurité et la conformité à la réglementation pour ce produit (P/N: 617600132F1-17) pour obtenir des renseignements détaillés sur la sécurité et la réglementation.

Ausführliche Sicherheits- und regulatorische Informationen sind in der Konformitätserklärung zur Sicherheit und Einhaltung von Normen zu diesem Produkt (P/N: 617600132F1-17) aufgeführt.

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.

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