Gfast

422G CPE

Gfast Bridge CPE

June 2019
611321713F22-13B

P/N: 11321713F22

Quick Start

DESCRIPTION

The ADTRAN® 422G Gfast Bridge Customer Premises Equipment (CPE) is a single-port unit with vectoring that allows delivery of ultra-fast broadband speeds to residential customers over existing copper wires. The 422G CPE is used to provide a Gigabit Ethernet LAN interface to the end user.

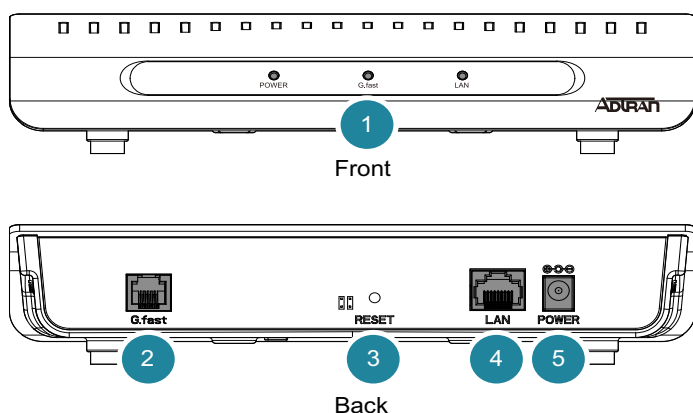Figure 1 shows the front and back of the 422G CPE.

Figure 1. ADTRAN 422G CPE

The following table lists the features of the 422G CPE illustrated in Figure 1.

Number	Feature
1	LEDs
2	Gfast RJ-11 interface
3	Reset button
4	Ethernet 10/100/1000Base-T RJ-45 interface (LAN)
5	12 V power connection (Power)

Power Connector

The power feed is +12 VDC from the included AC/DC adapter. The adapter plugs into the **POWER** connector. The total power consumption is less than 10 watts.

RJ-45 LAN Interface

The 422G CPE supports data service through one 10/100/1000BASE-T Ethernet interface via an RJ-45 style connector.

RJ-11 Gfast Interface

The RJ-11 Gfast interface is used to connect the 422G CPE to a wall phone jack. This provides Gfast capabilities using the existing phone lines.

Reset Button

To reset (reboot) the unit, insert a small pin or the end of a paper clip into the **RESET** opening and hold the button down for 10 seconds. The 422G CPE will automatically download the latest provisioning after the reset process has completed.

INSTALLATION

Before installing the 422G CPE, inspect it for damage. If damage has occurred during shipping, file a claim with the carrier and then contact ADTRAN. For more information, refer to the warranty.

Installation Guidelines

Follow the guidelines below when installing the 422G CPE.

- Read all warnings and cautions in the *422G Gfast Bridge CPE Safety and Regulatory Notice* before installing the 422G CPE.
- Do not locate the 422G CPE in direct sunlight or next to any thermal obstructions or source of moisture.
- Do not mount the 422G CPE higher than 9.8 ft (3 m) from the floor.
- Locate the 422G CPE near the service entrance and near a power location.

Installation Overview

Installation of the 422G CPE consists of the following steps:

- "Step 1: Position the 422G CPE"
- "Step 2: Connect the Ethernet Cable"
- "Step 3: Connect the Gfast RJ-11"
- "Step 4: Connect 12 VDC Power"

Installation Steps

Step 1: Position the 422G CPE

The 422G CPE can either be mounted on a wall or placed on a desktop.

Desktop Installation

Place the 422G CPE in a location that does not receive direct sunlight and is not next to any thermal obstructions or sources of moisture.
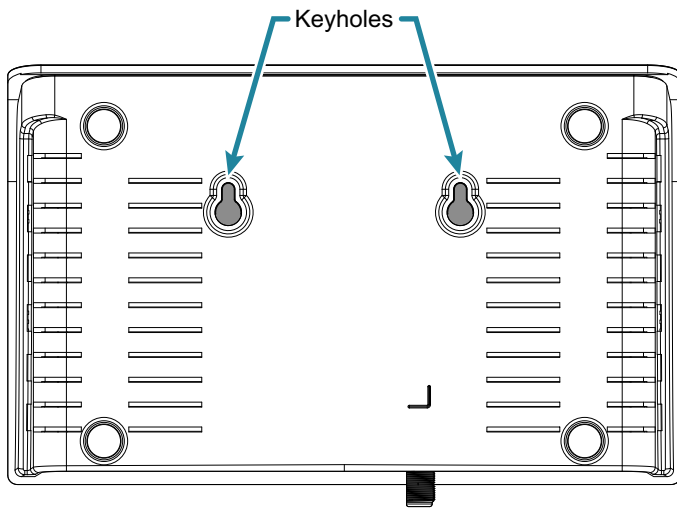
Wall Mount Installation

To wall mount the 422G CPE, complete the following steps:

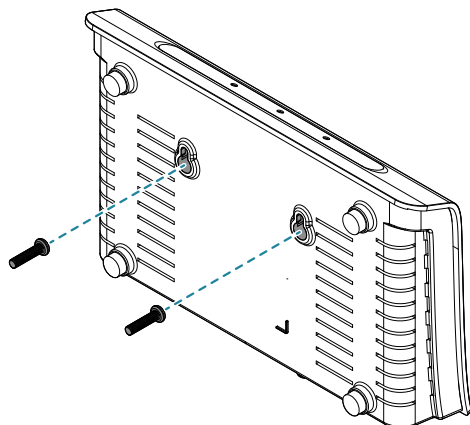1. Select a location for the 422G CPE.

ℹ️ NOTE
Do not mount the 422G CPE higher than 9.8 ft (3 m) from the floor.

2. Use the key holes on the bottom of the 422G CPE as a template and install two #6 drywall anchors (see Figure 2).

Figure 2. Wall Mount Keyholes

3. Install two 0.629 in (16 mm) #6 pan head screws into the drywall anchors. Leave approximately 1/4 in (6 mm) protruding from the mounting surface.

4. Slide the 422G CPE over the pan head screws (see Figure 3) and exert a small amount of downward pressure to ensure that the top of the slots are resting on the shafts of the pan head screws.

Figure 3. Mounting Hardware

Step 2: Connect the Ethernet Cable

The 422G CPE supports a gigabit Ethernet (10/100/1000BASE-T) connection via an RJ-45 style connector.

Insert a Cat 6 rated cable from your device into the RJ-45 **LAN** port on the back of the 422G CPE (see Figure 1 on page 1).

Step 3: Connect the Gfast RJ-11

⚠️ CAUTION!
For RJ-11 connections, to reduce the risk of fire, use only 26 AWG or larger (e.g., 24 AWG) UL Listed or CSA Certified Telecommunication Line Cord.

Insert the RJ-11 connector into the RJ-11 **G.FAST** port on the back of the 422G CPE.

Step 4: Connect 12 VDC Power

ℹ️ NOTE
Only power the 422G CPE with the AC/DC adapter supplied with the product.

Connect power as follows:

1. Plug the supplied 12 V AC/DC adapter into the **POWER** connection on the back of the 422G CPE.

2. Connect the power plug to a standard AC outlet.

3. Refer to the Front Panel LED table below to determine the status of the equipment.

Front Panel LED

Label	Status		Indication
POWER	○	Off	Power Loss
	●	Green	Power On
LAN	○	Off	LAN not Connected
	●	Green	LAN Connected
	✳	Green Flashing	LAN Activity
GFAST	●	Green	Link is Up
	✳	Green Flashing	Link is Down

TROUBLESHOOTING

The following table provides troubleshooting tips.

Problem	Possible Solution
The Power LED is Off	■ Verify that the power cable connector is properly seated in the power input. ■ Verify that the power adapter is plugged into a live AC outlet. ■ Check the power cable for shorts or breaks. ■ Disconnect the power input connector at the 422G CPE. Use a voltmeter to verify that the proper voltage level is present on the 12 V pin (power and power return) from the power adapter.
LAN LED is Off or Gfast LED is Flashing	Verify that the Ethernet or Gfast cable is properly plugged in to the 422G CPE.

PROVISIONING

The 422G CPE is provisioned using a Persistent Management Agent (PMA). No end-user provisioning is required.

SPECIFICATIONS

- Electrical
  - ♦ Voltage: 12.0 V (typical)
  - ♦ Minimum Voltage: 10.0 V
  - ♦ Maximum Voltage: 13.9 V
  - ♦ Power Consumption: 10 W (typical)
- Physical
  - ♦ Width: 8.0 inches (20.3 centimeters)
  - ♦ Depth: 5.3 inches (13.4 centimeters)
  - ♦ Height: 1.8 inches (4.5 centimeters)
  - ♦ Weight: 12.3 ounces (0.35 kilograms)
- Environmental
  - ♦ Operational Temperature: 32°F to +113°F (0°C to +45°C)
  - ♦ Storage Temperature: 14°F to +140°F (–10°C to +60°C)
  - ♦ Relative Humidity: 5 - 95%
- G.fast Standards: G.994.1, G.997.1, G.997.2, G.9700; G.9701

MAINTENANCE

The 422G CPE does not require routine hardware maintenance for normal operation. We do not recommend that you attempt repairs in the field. Obtain repair services by returning the defective unit to ADTRAN. Refer to the warranty for further information. Field support for software is provided through upgrade facilities.

SAFETY AND REGULATORY

Refer to the Safety and Regulatory Notice for this product (P/N: 611321713F22-17) for detailed safety and regulatory information.

Consultez l'avis sur la sécurité et la conformité à la réglementation pour ce produit (611321713F22-17) 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 (611321713F22-17) aufgeführt.

ADTRAN

Documentation for ADTRAN Network Solutions products is available for viewing and download directly from the ADTRAN Support Community website.

Go to: https://supportforums.adtran.com/welcome

Registration is required.

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

The following online documents and resources provide additional information for this product:
DPU 500G DSR 5.3.1.8 Engineering Guide

C A U T I O N !
SUBJECT TO ELECTROSTATIC DAMAGE
OR DECREASE IN RELIABILITY
HANDLING PRECAUTIONS REQUIRED

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

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