



# Fiber loco

GPON CPE

Model: UF-LOCO

QUICK START GUIDE

## Introduction

Thank you for purchasing the Ubiquiti Networks® UFiber loco. This Quick Start Guide is designed to guide you through the installation and also includes the warranty terms.

## Package Contents



UFiber loco



Wall Mount Bracket



Screws  
(Qty. 4)



Screw Anchors  
(Qty. 4)



Micro-USB Power Adapter\*  
(5V, 1A)



Quick Start  
Guide

\* Included only in the single-pack of the UF-LOCO.

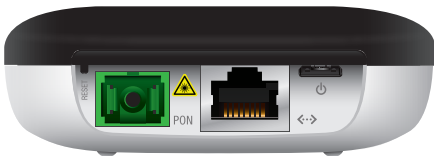
## System Requirements

- Linux, Mac OS X, or Microsoft Windows 7/8/10
- Web Browser: Google Chrome (Other browsers may have limited functionality)

**TERMS OF USE:** All Ethernet cabling runs must use CAT5 (or above). It is the professional installer's responsibility to follow local country regulations, including operation within legal frequency channels, output power, and indoor cabling requirements.

## Hardware Overview

### Reset Button





The *Reset* button serves two functions for the UF-LOCO:

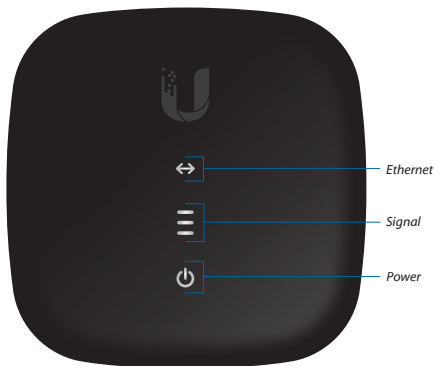
- **Restart** Press and release the *Reset* button quickly. The three signal LEDs will flash amber.
- **Restore to Factory Default Settings** Press and hold the *Reset* button for more than five seconds. The three signal LEDs will light amber in this sequence with a 100-ms delay between patterns:



### Ports

Port	Description
PON	SC/APC GPON port supports WAN connections of 2.488 Gbps downstream and 1.244 Gbps upstream.
	The <i>Micro-USB Power Adapter</i> connects to this port.
	The RJ45 Ethernet port supports a 10/100/1000 Mbps connection and passive 24V PoE to power the device.

## LEDs










### Ethernet LED

LED	State	Status
↔	Off	Ethernet connection down
	White	Ethernet connection up

### Power LED

LED	State	Status
⏻	Off	Power off
	White	Power on

## Signal LEDs

LED	State	Status
	Off	Bootup
	(1) White	Signal strength: low $\geq -28$ dBm
	(2) White	Signal strength: good $\geq -25$ dBm
	(3) White	Signal strength: strong $\geq -11$ dBm
	(1) Amber	Signal strength: too low $< -28$ dBm Check the quality of the fiber connection, and calculate the total optical loss of the optical splitters.
	(1) Amber (2) White	Signal strength: too strong $\geq -8$ dBm Add an optical splitter, or add a 5 or 10 dB optical attenuator.
	(3) Amber	No signal Check the fiber cables and connectors, and ensure that the OLT functions properly.
	Alternating Between (2) Amber (1) White and	No authority The UF-LOCO has not been authorized or cannot communicate with the OLT. Check passwords and OLT settings.
(Varies)	Signal Strength	

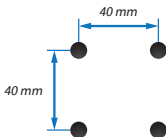
## Hardware Installation

The UF-LOCO can be mounted on a wall or placed on a desktop.

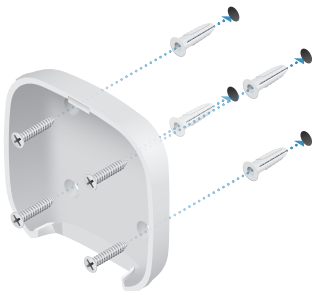
**!** **WARNING:** To reduce the risk of fire or electric shock, do not expose the UF-LOCO to rain or moisture.

### Wall Mounting

1. Use the *Wall Mount Bracket* as a template and drill four 6 mm holes as shown below.



2. Insert a *Screw Anchor* into each hole, and then fasten the *Wall Mount Bracket* using four *Screws*.



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3. Mount the UF-LOCO by inserting the top of the UF-LOCO into the *Mount Bracket* and then pivot the bottom into the bracket until it locks into place.



## Connecting Fiber

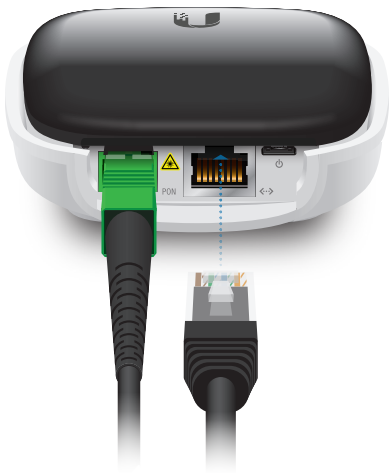
Connect the fiber optic cable from the Passive Optical Network to the **PON** port.





## Connecting LAN

1. Connect an Ethernet cable to the LAN port.



2. If you are using PoE, go to *Connecting Power*.  
If you are using the *Micro-USB Power Adapter*, connect the other end of the Ethernet cable to your LAN.

## Connecting Power

Connect the power using one of the following options:

- Using the *Micro-USB Power Adapter*: Go to *Connecting to the Micro-USB Power Adapter*.
- Using an *airCube™* (not included): Go to *Connecting to the airCube*.



**Note:** The *airCube* provides Wi-Fi connectivity with PoE passthrough, so it is the ideal complement to the UF-LOCO for CPE installations.

- Using a PoE switch (not included): Connect the Ethernet cable from the UF-LOCO to a PoE-enabled Ethernet port on the switch.



**WARNING:** The PoE switch must comply with the power specifications listed in the *Specifications* section of this Quick Start Guide.

## Connecting to the Micro-USB Power Adapter

1. Connect the *Micro-USB Power Adapter* to the *power* port.



2. Plug the *Micro-USB Power Adapter* into a power outlet.

## Connecting to the airCube

1. Connect the Ethernet cable from the UF-LOCO to the *WAN 24V PoE OUT* port on the back of the airCube (not included).



2. To power the airCube, follow the instructions in its Quick Start Guide.

## Accessing the Configuration Interface

1. Ensure that your computer (or other host system) is connected to the UF-LOCO.
2. Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet.
3. Launch your web browser. Type **http://192.168.1.1** in the address field. Press **enter** (PC) or **return** (Mac).



4. The login screen will appear. Enter **ubnt** in the *Username* and *Password* fields. Click **Login**.




The UFiber Configuration Interface will appear. Customize settings as needed. For more information, refer to the UFiber resources, which are available at:

**<http://ubnt.link/UFiber-Support>**

## OLT Compatibility Profiles

The UF-LOCO is compatible with most major brands of OLT (Optical Line Terminal) and offers four compatibility profiles.

By default the UF-LOCO is set to **Profile 1** - Ubiquiti Networks UFiber OLT. For other brands, manually select **Profile 2, 3, or 4**.

1. Log into the UFiber Configuration Interface.
2. The *Dashboard* screen will appear. Click the **Settings**  tab.



3. On the *Network* screen, click the **System** tab.



4. Select the appropriate profile from the *OLT Profile* drop-down menu:
  - **Profile 1** Ubiquiti Networks UFiber OLT
  - **Profile 2** Other brands
  - **Profile 3** Other brands
  - **Profile 4** Other brands



**Note:** For more information, visit:

<https://ubnt.link/Supported-3rd-Party-OLTs>



5. Click **Save Changes**.

The UF-LOCO will automatically restart with the new profile.

## Specifications

UF-LOCO	
Dimensions	76.5 x 76.5 x 26.4 mm (3.01 x 3.01 x 1.04")
Weight	77 g (2.72 oz)
Networking Interfaces	(1) SC/APC, GPON WAN (1) RJ45, Ethernet LAN
Networking Interface Speeds	(1) GPON WAN, ITU G.984, 2.488 Gbps Downstream, 1.244 Gbps Upstream (1) GbE LAN, 10/100/1000 Mbps
Management Interface	In-Band Ethernet PON
Normal Optical Power Range	TX (Class B+): 1.5 to 5 dBm RX: -28 to -8 dBm
Power Method	Micro-USB: 5V, 1A 24V Passive PoE (Pins +4, 5; -7, 8)
Power Supply	Micro-USB Power Adapter*: 5V, 1A
Max. Power Consumption	3.5W
Supported Voltage Range	4.7 to 5.3V
Processor Specs	MIPS-32, 240 MHz
Memory Information	128 MB DDR3
Button	(1) Reset
Operating Temperature	-10 to 45° C (14 to 113° F)
Operating Humidity	10 to 90% Noncondensing
Certifications	CE, FCC, IC

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