



Fiber

Gigabit Passive Optical Network

Models: UF-OLT, UF-OLT-4, UF-Nano, UF-LOCO

GPON End-to-End Solution

High-Performance, Provider OLT

Low-Cost, Robust ONU CPE



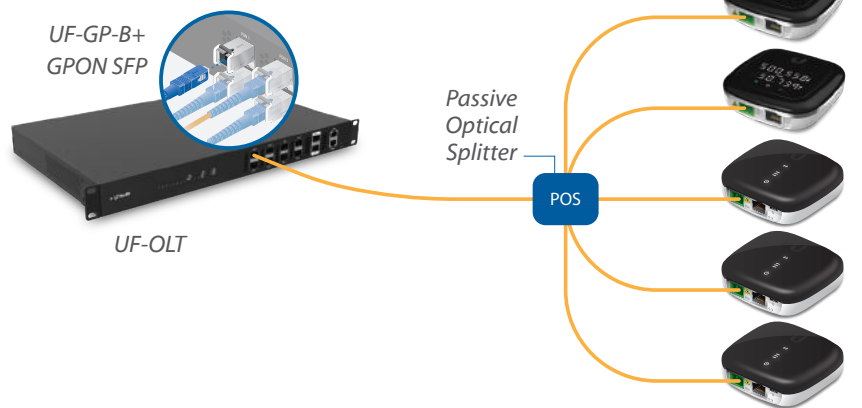


High-Performance GPON

Configuring a fiber network just became as easy as setting up a smartphone. Say goodbye to command lines, manuals, and paid support licenses. Introducing the UFiber OLT – a fiber solution that anyone can deploy.

UFiber offers internet and telecom service providers a cost-effective fiber optic delivery system for Triple Play Services (data, voice, IPTV/VoD) with speeds of up to 2.488 Gbps downstream and 1.244 Gbps upstream.

The UFiber network is intelligently managed using the included UNMS™ (Ubiquiti® Network Management System) controller. UFiber devices consist of the UFiber OLT or OLT-4 (deployed at the provider premises) and the UFiber Nano G or loco clients, which function as ONU CPEs (Customer Premises Equipment).



Up to 128 UF-Nano or UF-LOCO per OLT GPON Port

UNMS™

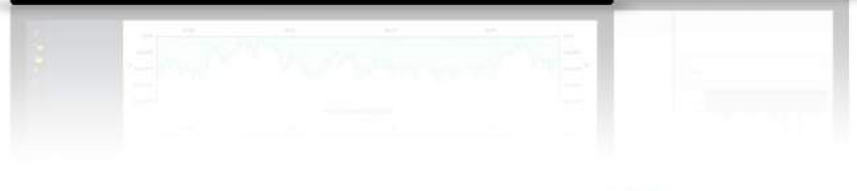
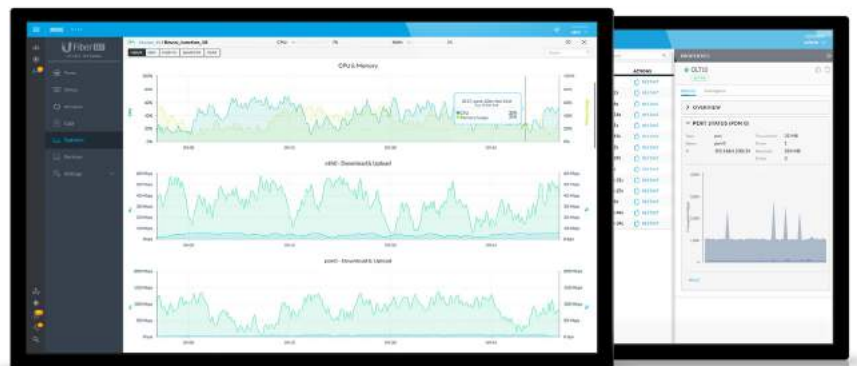
UFiber Controller Software

Ubiquiti Networks distinguishes itself with a library of powerful and intuitive management software that is included at no additional cost. The UNMS is the latest addition to the library.

UNMS is a comprehensive management controller, featuring a graphical UI that is easy to learn and navigate. UNMS manages all of the registered UFiber OLTs and all of their ONU clients.

Features

- Intuitive, Graphical Web UI
- Quick Configuration and Deployment of UFiber Devices
- Centralized Management of Multiple GPON Networks and Sites
- Graphical Reports for Efficient Monitoring and Troubleshooting
- Linux-based Software Installation
- Bundled Software – No Licensing or Support Fees



Optical Line Terminal

The UFiber OLT supports up to 128 ONU CPEs per GPON port with physical links of up to 20 km in distance. It also features SFP+ connectivity for uplinking.

The UFiber OLT is available in two models: the UF-OLT for eight GPON ports and the UF-OLT-4 for four GPON ports.

Features

- **GPON Speeds:**
 - 2.488 Gbps Upstream (TX)
 - 1.244 Gbps Downstream (RX)
- **Wavelengths:**
 - 1490 nm Upstream (TX)
 - 1310 nm Downstream (RX)
- **GPON Range:** Up to 20 km Link
- **Mounting Options:**
 - 1U Rack
 - Wall
 - Desktop
- **Management Options:**
 - Gigabit Ethernet Port (Out-of-Band)
 - RJ45 Serial Console Port (CLI)

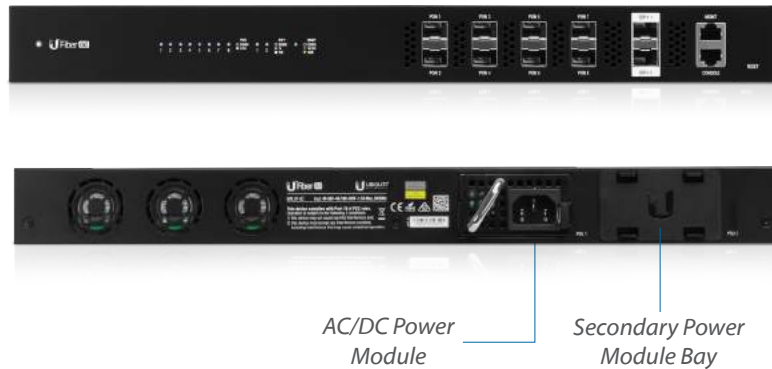


Model: UF-OLT

8-Port GPON Optical Line Terminal

Features

- **Ports:**
 - (8) GPON SFP Ports
 - (2) SFP+ Ports
- **Concurrent Clients:** 1024 ONUs Total (128 Clients per Port)
- **Max. Power Consumption:** 40W
- **Power Method:** Hot-Swappable Power Module(s)
 - AC/DC Power Module (Included)
 - DC/DC Power Module (Optional)



Model: UF-OLT-4

4-Port GPON Optical Line Terminal

Features

- **Ports:**
 - (4) GPON SFP Ports
 - (1) SFP+ Port
- **Concurrent Clients:** 512 ONUs Total (128 Clients per Port)
- **Max. Power Consumption:** 35W
- **Power Method:** 100-240VAC/50-60 Hz, Universal Input



U Fiber | Nano™ G

Model: UF-Nano

GPON Optical Network Unit

Featuring an informational LED display, the U Fiber Nano G is a robust, high-performance GPON CPE housed in a sophisticated design. It is powered by 24V passive PoE.

Features

- **WAN:** (1) GPON Port
- **LAN:** (1) Gigabit Ethernet Port
- **GPON Speeds:** 2.488 Gbps Downstream (RX), 1.244 Gbps Upstream (TX)
- **Wavelengths:** 1490 nm Downstream (RX), 1310 nm Upstream (TX)
- **Display:** Digital LED for Status Reporting
- **Max. Power Consumption:** 7W
- **Power Method:** 24V Passive PoE
- **Mounting:** Wall-Mountable (Indoor)



U Fiber loco

Model: UF-LOCO

GPON Optical Network Unit

Sporting a sleek industrial design, the U Fiber loco is a robust, high-performance GPON CPE that features extremely low power consumption and the choice of 24V passive PoE or Micro-USB power.

Features

- **WAN:** (1) GPON Port
- **LAN:** (1) Gigabit Ethernet Port
- **GPON Speeds:** 2.488 Gbps Downstream (RX), 1.244 Gbps Upstream (TX)
- **Wavelengths:** 1490 nm Downstream (RX), 1310 nm Upstream (TX)
- **Max. Power Consumption:** 3.5W
- **Power Method:** 24V Passive PoE or Micro-USB Power Adapter*
- **Mounting:** Wall-Mountable (Indoor)

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



UFiber Accessories

GPON SFP Modules

The UFiber OLT's GPON SFP ports are designed for use with the UF-GP-B+ and UF-GP-C+ SFP modules.

Each model, the UF-OLT or UF-OLT-4, includes one UF-GP-B+ module; additional modules can be purchased separately.

FiberModule™ Model Comparison



| | UF-GP-B+ | UF-GP-C+ |
|----------------------|-------------------|-------------------|
| Supported Media | Single-Mode Fiber | Single-Mode Fiber |
| Connector Type | (1) SC/UPC | (1) SC/UPC |
| TX Wavelength | 1490 nm | 1490 nm |
| RX Wavelength | 1310 nm | 1310 nm |
| TX Power Range | 1.5 to 5 dBm | 3 to 7 dBm |
| RX Power Range | -28 to -8 dBm | -30 to -12 dBm |
| Downstream Data Rate | 2.5 Gbps | 2.5 Gbps |
| Upstream Data Rate | 1.25 Gbps | 1.25 Gbps |
| Cable Distance | 20 km | 20 km |
| Pack Options | 20-Pack | 20-Pack |

Power Modules

The UF-OLT comes with one AC/DC power module pre-installed and features two modular power adapter bays for flexible power options:

Backup Power The second power bay can house a backup power module. If the UF-OLT detects failure of the primary power module, the backup module automatically activates to supply uninterrupted power.

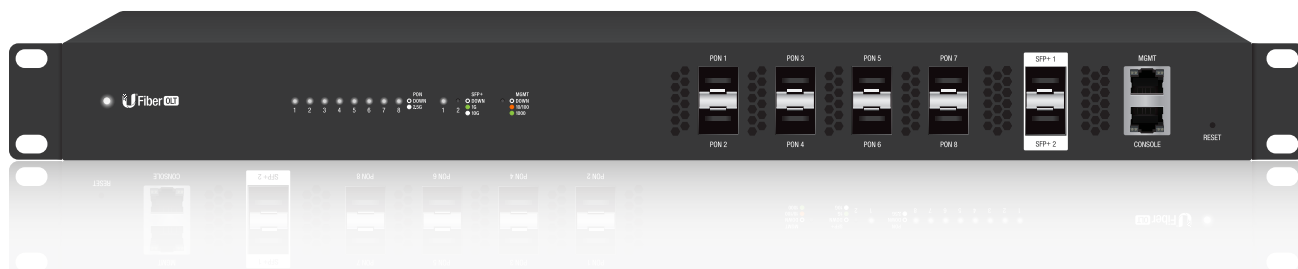
DC/DC Power Both power bays can also house a DC/DC power module for use with DC power.

Available power modules are: RPS-AC-100W and RPS-DC-100W.

PowerModule™ Model Comparison



| | RPS-AC-100W | RPS-DC-100W |
|-----------------------|-----------------------------|-----------------------------|
| Power Type | AC/DC | DC/DC |
| Input Voltage Range | 90-264VAC | 38-54VDC |
| Output Voltage Range | 24-26VDC | 23-25V |
| Operating Temperature | -10 to 45° C (14 to 104° F) | -10 to 50° C (14 to 122° F) |
| Operating Humidity | 5 to 95% Noncondensing | 5 to 95% Noncondensing |



Hardware Specifications

| UF-OLT | |
|----------------------------------|--|
| Dimensions | 442.4 x 285.6 x 43.7 mm (17.42 x 11.24 x 1.72") |
| Weight (with Mount Brackets) | 4.40 kg (9.70 lb) 4.495 kg (9.91 lb) |
| Networking Interfaces | (8) GPON OLT SFP (2) 1G/10G SFP+ |
| Concurrent Clients | 1024 Registered ONUs/ONTs (128 per GPON Port) |
| Management Interfaces | (1) Ethernet for Out-of-Band Management (1) RJ45 Serial Console Port |
| GPON Speeds | 2.488 Gbps Upstream (TX) 1.244 Gbps Downstream (RX) |
| Operating Wavelengths | 1490 nm TX 1310 nm RX |
| Normal Optical Power Range | TX (Class B+): 1.5 dBm to 5 dBm RX: -28 dBm to -8 dBm |
| Range | |
| Physical Reach | 20 km |
| Logical Reach | 60 km |
| Max. Differential Fiber Distance | 20 km (B+) /40 km (C+) |
| Power Method | 100-240VAC, 100W AC/DC Power Module (Included) 38-54VDC, 100W DC/DC Power Module (Optional) |
| Power Supply | (1) 25V, 100W AC/DC PSU Module (Included) |
| Max. Power Consumption | 40W (Excluding SFP Modules) |
| Operating Mode | OLT 2/3 Ethernet Switch and GPON Core |
| Advanced QoS | Supports 8 Priority Queues per User Port and Traffic Classification |
| Processor Specs | MIPS 1004kc, 880 MHz Dual Core |
| Memory Information | 512 MB DDR3, 512 MB NAND |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 10 to 90% Noncondensing |
| Certifications | CE, FCC, IC |



Hardware Specifications

| UF-OLT-4 | |
|----------------------------------|---|
| Dimensions | 299.80 x 258.95 x 42.55 mm (11.80 x 10.19 x 1.68") |
| Weight (with Mount Brackets) | 1.93 kg (4.25 lb) 2.13 kg (4.70 lb) |
| Networking Interfaces | (4) GPON OLT SFP (1) 1G/10G SFP+ |
| Concurrent Clients | 512 Registered ONUs/ONTs (128 per GPON Port) |
| Management Interfaces | (1) Ethernet for Out-of-Band Management (1) RJ45 Serial Console Port |
| GPON Speeds | 2.488 Gbps Upstream (TX) 1.244 Gbps Downstream (RX) |
| Operating Wavelengths | 1490 nm TX 1310 nm RX |
| Normal Optical Power Range | TX (Class B+): 1.5 dBm to 5 dBm RX: -28 dBm to -8 dBm |
| Range | |
| Physical Reach | 20 km |
| Logical Reach | 60 km |
| Max. Differential Fiber Distance | 20 km (B+) /40 km (C+) |
| Power Method | 100-240VAC/50-60 Hz, Universal Input |
| Power Supply | AC/DC Internal 56W DC |
| Max. Power Consumption | 35W (Excluding SFP Modules) |
| Operating Mode | OLT 2/3 Ethernet Switch and GPON Core |
| Advanced QoS | Supports 8 Priority Queues per User Port and Traffic Classification |
| Processor Specs | MIPS 1004kc, 880 MHz Dual Core |
| Memory Information | 512 MB DDR3, 512 MB NAND |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 10 to 90% Noncondensing |
| Certifications | CE, FCC, IC |



Hardware Specifications

| UF-Nano | |
|-----------------------------|--|
| Dimensions | 77 x 77 x 28 mm (3.03 x 3.03 x 1.1") |
| Weight | 110 g (3.88 oz) |
| 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 dBm to 5 dBm RX: -28 dBm to -8 dBm |
| Power Method | Passive PoE (Pins +4, 5; -7, 8) Dying Gasp Support |
| Power Supply | PoE Adapter: 24V, 0.3A (Included) |
| Max. Power Consumption | 7W |
| Supported Voltage Range | 20V to 28V |
| Processor Specs | MIPS32, 240 MHz |
| Memory Information | 128 MB DDR3 |
| Buttons | (1) Display Information (1) Reset |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 5 to 95% Noncondensing |
| Certifications | CE, FCC, IC |



Hardware 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 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 dBm to 5 dBm RX: -28 dBm 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 | MIPS32, 240 MHz |
| Memory Information | 128 MB DDR3 |
| Buttons | (1) Reset |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 10 to 90% Noncondensing |
| Certifications | CE, FCC, IC |

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

