Datasheet

Fiber

Gigabit Passive Optical Network

Models: UF-OLT, UF-Nano

GPON End-to-End Solution

High-Performance, Provider OLT

Low-Cost, Robust ONU CPE

UBIQUITI® NETWORKS

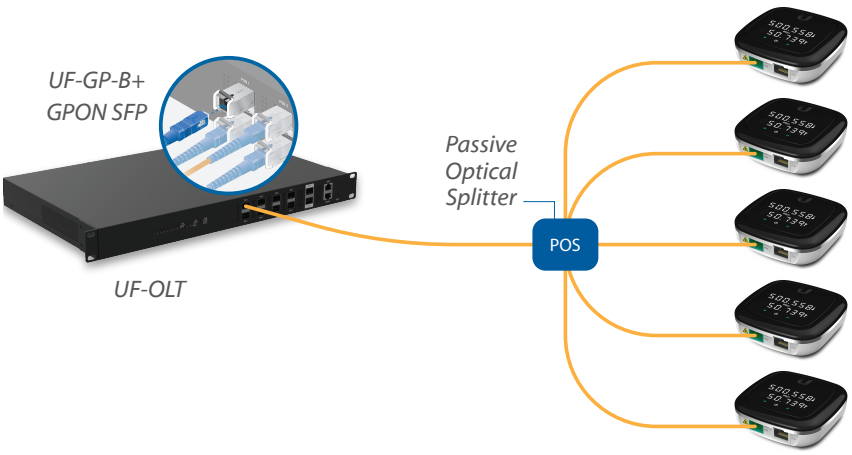
UFiber

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 (deployed at the provider premises) and the UFiber Nano™G consumer premises equipment ONUs.



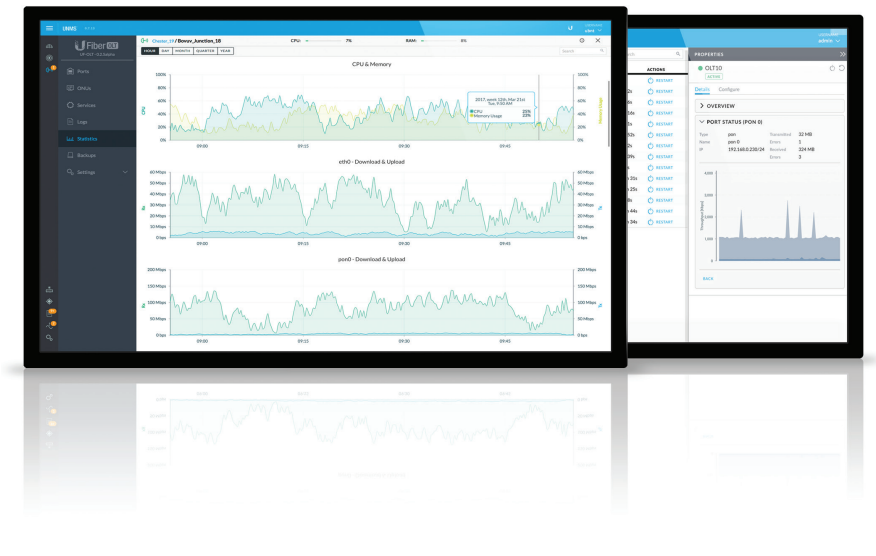
Up to 128 UF-Nano per OLT GPON Port

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.

The UNMS is a comprehensive management controller, featuring a graphical UI that is easy to learn and navigate. UNMS manages all of the registered UF-OLTs and all of their UF-Nano 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 for Low-Cost Setup
- No Licensing or Usage Fees

UFiber OLT

Model: UF-OLT

GPON Optical Line Terminal

The UFiber OLT offers eight GPON ports and supports up to 1024 concurrent clients with physical links of up to 20 km in distance. Two SFP+ ports provide 10G of uplink connectivity.

The UF-OLT provides flexible power options, with two modular power adapter bays that can house either AC/DC or DC/DC power modules. One AC/DC module is included; additional modules can be purchased separately.

Features

- **Ports:** (8) GPON SFP Ports, (2) SFP+ Ports
- **Concurrent Clients:** 1024 ONUs
- **GPON Range:** Up to 20 km Link
- **GPON Speeds:** 2.488 Gbps Upstream (TX), 1.244 Gbps Downstream (RX)
- **Wavelengths:** 1490 nm Upstream (TX), 1310 nm Downstream (RX)
- **Max. Power Consumption:** 40W
- **Power Method:**
  - AC/DC Power Module (Included)
  - DC/DC Power Module (Optional)
- **Mounting:** 1U Rack-Mountable (Optional)

UFiber Nano G

Model: UF-Nano

GPON Optical Network Unit

The UFiber Nano G is a robust, high-performance GPON CPE that features an informational LED display and a sleek, sophisticated industrial design.

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)

Accessories

GPON SFP Module

The UFiber OLT's GPON SFP ports are designed for use with the UF-GP-B+ SFP module. The UF-OLT includes one UF-GP-B+ module; additional modules can be purchased separately.

UF-GP-B+ Specifications

- **Supported Media:** Single-Mode Fiber
- **Connector Type:** (1) SC/UPC
- **TX Wavelength:** 1490 nm
- **RX Wavelength:** 1310 nm
- **Downstream Data Rate:** 2.5 Gbps
- **Upstream Data Rate:** 1.25 Gbps
- **Cable Distance:** 20 km
- **Pack Options:** 20-Pack

UF-GP-B+

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 (sold separately) are:

Power Type	Model Number
AC/DC	RPS-AC-100W
DC/DC	RPS-DC-100W

RPS-AC-100W

RPS-DC-100W

Fiber OLT

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 (9.7 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: -8 dBm to -28 dBm
Range Physical Reach Logical Reach Max. Differential Fiber Distance	 20 km 60 km 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

Fiber | Nano G

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: -8 dBm to -28 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

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