

# WaveAccess 4520

4x1GbE + 2xPOTS + USB + WiFi 802.11b/g/n (2x2 MIMO) and ac (3x3 MIMO)

## Features



WaveAccess 4520

Optical Network Terminal (ONT) designed for residential, hospitality and small business use. Complies with the ITU G.984.x standards and provides home Gateway functionalities to enable triple play services and WiFi for network access.

### Bandwidth

It maximizes the usage of the GPON network by allowing data transferring at rates of 2.488 Gbps (Downstream) and 1.244 Gbps (Upstream).

KEY FEATURE

### Interoperable

Compatible with main vendors' GPON OLTs\*

### Class B+ optics

To transmit and receive optical power according to ITU-T G.984.2 standard.

### ITU-T G.984 - OMCI

The OMCI stack has been implemented following the standard.

KEY FEATURE

### WiFi 802.11 ac

WiFi bridging performed at hardware level, offering the best throughput. On top, it supports 802.11 b/g/n/ac, to provide the best range and speed.

### AES encryption and FEC coding

Compatible with AES-128 encryption and FEC coding, supported in both uplink and downlink.

### IPTV Filtering

It allows filtering by destination IP address, which enables the operator to offer different IPTV packs per client within the same PON.

### Factory Default settings

The Operator can set Factory default values for Router configuration, preventing configuration problems if user presses the Reset button.

### POTS ports

Two POTS ports that can be configured in single or dual mode.

## TELNET WaveAccess family

TELNET Redes Inteligentes WaveAccess family offers a wide variety of ONTs based on GPON technology (Gigabit Passive Optical Network).

Aiming to cover the different needs that can appear during a GPON network deployment, TELNET offers level 2 and level 3 ONTs, in SFP format, with Gigabit Ethernet ports, POTS ports, WiFi, integrated Router or RF output for video overlay services. (RF Overlay).

This variety of ONTs allow the operator to deploy the most adequate equipment for each of the different access architectures available, such as Fiber To The Home (FTTH), Fiber To The Building (FTTB) or Fiber To The Desk (FTTD), as well as the different environments of the user network, such as residential, industrial or business.

The WaveAccess family implements the OMCI stack and support VLAN tagging (802.1p and Q-in-Q), which makes them capable of supporting the services defined in the technical report of the Broadband Forum TR-156.

All WaveAccess family ONTs are 100% compatible with TELNET's SmartOLT family and their web management systems, the TGMS (TELNET GPON Management System) and the ZTP (Zero Touch Provision), GPON CPE provisioning software.

By using the TGMS, the operator can configure triple play services in few minutes and manage all the deployed SmartOLTs and ONTs, all this from a single web interface, and in an easy and intuitive way.

The WaveAccess ONTs firmware is remotely upgradable via OMCI from the header OLT without user intervention.

The ZTP allows to automate and manage the additional and specific configuration required by all the WaveAccess ONTs in the PON, avoiding the need of accessing all of them one by one.

## Technical Specifications

## General features

2.5Gbps downstream and 1.25Gbps in upstream  
 4x10/100/1000 Base-T Ethernet  
 2xPOTS for VoIP services  
 WiFi 802.11b/g/n (2x2 MIMO) and ac (3x3 MIMO)  
 Interoperable with main vendors' OLTs\*

## GPON

Designed following ITU-T G.984.x and G.988  
 Complies with Broadband Forum TR-156  
 Activation with automatically discovered SN and password in conformity with ITU-T G.984.3  
 AES-128 Encryption with key generation and switching  
 Bi-directional FEC (Forward Error Correction)  
 Rogue ONT Autodetection

## Optical interface

SC/APC connector  
 2.488 Gbps Downstream / 1.244G bps Upstream  
 Class B + optics (28dB optical budget)  
 Wavelengths: US 1310nm and DS 1490nm

## Ethernet interface

4 x 10/100/1000 Base-T interfaces for RJ-45  
 Tagging/change of VLAN at the Ethernet port  
 VLAN stacking (Q-in-Q), VLAN translation and filtering  
 802.1p traffic priority tagging  
 IGMP Snooping, supports IGMP v1/v2/v3  
 Multicast filtering based on multicast destination address

## POTS interface

2 x RJ-11 (single or dual mode)  
 Multiple codecs support: G.711ALaw, G.711µLaw, G.729a, G.722

## USB interface

1xUSB 2.0

## Router

PPPoE client functionality  
 NAT/NATP functionality  
 DHCP client/server for dynamic IP allocation

## WLAN

WiFi IEEE 802.11 b/g/n & ac, high efficiency internal antennas  
 2.4Ghz with 13 channels 2x2 MIMO  
 802.11ac 5Ghz with 3x3 MIMO  
 WEP, WPA and WPA2. Allows WPS authentication  
 WiFi-LAN/WAN wirespeed switching

## Installation

Dimensions  
 220mm x160mm x35mm  
 Weight: <1Kg  
 Power supply:  
 Adapter input: 100-240V AC 50/60Hz  
 Adapter output: 12VDC / 2A  
 Operational range:  
 Temperature: -10 ~ 45° Celsius  
 Humidity: 10 ~ 90% de relative

## Ordering information

Name: WaveAccess 4520  
 Reference: 800010122



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\*For further information about interoperability, please contact TELNET Redes Inteligentes

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