



## GPON OPTICAL MODEM LW110-44B

### Description

The ONT LW110-44B is a terminal equipment compliant with the ITU-T G.984. It is ideal for enterprise, healthcare, smart city, educational, logistics, and other environments for PON LAN solutions. It provides users with the ability to access the internet and high-quality voice services. It has 4 data ports 10/100/1000 Base-T Gigabit Ethernet and It has 4 POTS FXS ports. Supports data rates up to 1.25 Gbps upstream and 2.5 Gbps downstream.

### Constructive Characteristics

Gross Unit Weight	Weight: 500g;
Dimension	Dimensions (W x L x H): 244 x 161 x 41mm;

### Electrical Characteristics

Power Input	External power supply, AC input 90~250 VAC, output 12 VDC, maximum current 1.5A; (Not included)
Power	Electrical power consumption: <10W

### Environmental Characteristics

Storage Temperature (°C)	-5 ~ 50 ° C.
Operation Temperature (°C)	0 ~ 40 °C.
Operating Humidity	5 ~ 90%, non-condensing.

### Compatibility

- 35510228 - AC/DC POWER SUPPLY FOR GPON OPTICAL MODEM NEMA STANDARD 1-15P
- 35510401 - POWER SUPPLY ADAPTER STANDARD IRAM 2063 (ARGENTINA) FOR OPTICAL MODEM

\*The ONT LW110-44B does not come with a power supply; it must be purchased separately.

## Features

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### Management

- Management support via OMCI protocol according to the G.984.4 standard;
  - Local access via Telnet and SSH connection;
  - Password change required after first login;
  - Remote Access (OLT) via Telnet and SSH connection;
  - MIB manipulation through OMCI by Create, Delete, Set, Get, Get Next commands;
  - Remote software image download;
  - Activation with auto-discovery SN and password, in accordance with ITU-T G.984.3;
  - Bandwidth configuration by service or port (fixed, guaranteed and maximum);
  - Remote activation and rebooting;
  - Alarms and performance monitoring.
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### GPON

- Full support for ITU-T G.984;
  - FEC Support;
  - Support up to 32 T-CONTs;
  - Support up to 256 GEM ports;
  - Flexible mapping support between TCONT and GEM port;
  - Support RTCP(RFC3550,3551);
  - GPON Tx:
    - Upstream 1.25 Gbps transmission;
    - Wavelength: 1310nm;
    - Based on T-CONTs;
    - Transmission power: 0.5 to +5 dBm;
  - GPON Rx:
    - Downstream transmission 2.48 Gbps;
    - Wavelength: 1490nm;
    - Based on GEM Ports;
    - Sensitivity: -27 dBm;
    - Saturation: -8 dBm.
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## Layer 2

- Authentication control via 802.1x;
- Support for sticky port-security mode for network access control;
- Support for 1518 byte IEEE 802.3as MTU;
- Support for 802.1p, 802.1d, 802.1q;
- Support for 802.3, 802.3u, and 802.3ab;
- Support for the 802.3az standard, Green Ethernet;
- Untagged port configuration;
- VLAN tagging/untagging;
- VLAN double tagging, IEEE 802.1ad;
- VLAN Switching;
- VLAN Translate;
- VLAN Stacking (Q-in-Q);
- VLAN Translation;
- Automatic MAC learning;
- 1.024 MAC addresses;
- Supports up to 8 VLANs per ONT;
- Auto-MDI/MDIX support;
- Self-negotiation;
- Flow Control;
- MAC Addresses learning with Auto-Aging
- VLAN filter per port;
- Support Loop detect.

## Multicast

Support IGMP V2/V3 Snooping

## POTS (FXS)

- Support for SIP, H.248, MGCP, SDP and RTP protocol;
- Support for G.711, G.723, G.726, G.729 (A/B);
- Support for SIP services: Caller-id, call waiting, call transfer, Three Way, Toggle;
- Support T.38 FAX;
- Support for echo cancellation, compatible with G.165, G.168;
- 5-REN support per FxS port;
- Configurable dial plan;
- Sending DTMF in-band or out-band;

## Qos

- Support classification of packets based on DSCP and IP protocols;
- Support classification of packages based on 5 classification combination;
- Support for scheduling algorithms SP, WRR, SP+WRR;
- QoS 1 tag per service.

## Interfaces

Product Interfaces	<p><b>GPON</b></p> <ul style="list-style-type: none"> <li>• SC-APC Connector;</li> </ul> <p><b>Ethernet</b></p> <ul style="list-style-type: none"> <li>• 4xGE 10/100/1000 Base-T RJ-45 connector;</li> </ul> <p><b>FXS/Pots</b></p> <ul style="list-style-type: none"> <li>• 4x RJ-11 FXS;</li> </ul> <p><b>USB</b></p> <ul style="list-style-type: none"> <li>• 2x USB 2.0 Type A with 480 Mbps speed</li> </ul>
Packaging	
Items Included	<p>Warranty certificate</p> <p>Product quick guide in the languages:</p> <ul style="list-style-type: none"> <li>• Portuguese</li> <li>• Spanish</li> <li>• English</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>• NOM</li> </ul>
Notes	
Warranty	<ul style="list-style-type: none"> <li>• One-year warranty.</li> <li>• Software Technical Validity: 365 days.</li> </ul> <p>Warranty coverage and technical support service are conditional on the exclusive use of GPON Furukawa family equipment (OLTs, ONUs, Power Supplies, Transceivers, ...)</p>

[Part Numbers](#)