

# Internet Access Solution

Dual Mode xPON ONT+ 300Mbps Wireless Router

MODEL: FHR3100GZB + FHW11



FHR3100GZB Dual Mode xPON ONT 1GE LAN Port

#### FHW11

802.11n 300Mbps Router

1FE WAN + 2FE LAN





### Overview

FHR3100GZB xPON ONT and FHW11 300Mbps Router package solution is developed by FH-NET for the broadband access market based on EPON/GPON technology to meet the needs of Telecom operators for broadband access and FTTH. Together with FH-NET OLT central office products and EMS network management system. And It is fully compliant with technical regulations such as ITU-T G.984.x and technical requirement of GPON Equipment (V2.1 and above version) and comply with IEEE802.3ah, meet the "YD/T 1475–2006 access network technical requirements of EPON and "the China Telecom EPON equipment technical requirements" for GEPON Related requirements for ONT equipment.

It is a small-capacity system which can well meet the application of FTTH/FTTO/FTTB network.Efficient bandwidth utilization and Ethernet service support capabilities help operators deliver reliable service quality assurance to their customers.The device supports the up-link and down-link symmetric 1Gbps transmission rate, providing users with good QOS guarantee and flexible bandwidth allocation.Efficient bandwidth utilization and Ethernet service support capabilities help operators.

Integrated wireless function, fully compliant with 802.11 n/b/g wireless standard protocol, built-in high-gain directional antenna, wireless transmission rate up to 300Mbps, with strong penetrating power and wide coverage, providing users with more efficient data transmission guarantee.

#### PHYH ME Making the World Better

### Characteristics

- Plug and play, integrate auto detection, auto configuration and auto firmware upgrading;
- Support diagnostic monitoring and remote disabling of fiber optical;
- Full speed 1G non-blocking switching;
- 2048 MAC address table;
- Integrated port monitoring, port mirroring, port rate limiting, port SLA, etc.
- Support auto polarity detection of Ethernet ports (AUTO MDIX);
- Integrated IEEE802.1p QoS with four level priority queues;
- Supports mixed network with mainstream OLT to minimize operators' network construction costs;
- With the industry's most advanced technology, it has powerful functions and QoS guarantees in Ethernet services;
- Desktop devices take up less space and consume less power.
- Incredible wireless high speed up to 300Mbps, great for faster downloading, Internet calling and HD video streaming
- MIMO high gain 5dBi antennas providing maximum range and stable connections
- Dual operation modes Router, Bridge (pure access point)
- Various WAN connection types in AP Router mode- DHCP, Static IP, PPPoE, L2TP, PPTP, Dual Access, WISP
- Multiple wireless modes- AP, Repeater, AP+WDS, WDS, Client
- Multi-SSID providing up to 3 additional separate networks for guests and friends
- Easy wireless security setup at a push of the WPS button
- Intelligent bandwidth control to manage the bandwidth usage for each computer reasonably
- Internet Access Control- IP filtering, MAC Filtering, Domain Filtering based on time
- Quick setup, with built-in multilingual management page



### ONT Specification

| Technical items | Descriptions  |
|-----------------|---|
| Dimension       | 100*65*20mm(length*width*height)  |
| Net weight      | ≤0.1Kg  |
| Fiber port      | 1 GPON interface, SC single-mode/single-fiber,<br>Downstream rate 2.5Gbps, Upstream rate 1.25Gbps |
| Wavelength      | Tx 1310nm, Rx 1490nm  |
| Fiber interface | SC/PC   |
| RX sensitivity  | <-28dBm (1490nm)  |
| LAN             | 1*10/100/1000Mbps adaptive Ethernet ports, full/half duplex, RJ45 interface                       |
| Throughput      | Throughput can reach 900Mbps or more  |
| DC power        | 5V 1A, external AC–DC power adapter   |
| Button          | Reset, power  |
| Power           | ≤8W   |
| Operation       | Working temperature: $-5 \sim +55^{\circ}$ working humidity:10 $\sim$ 90% (non-condensation)      |
| Storage         | Storage temperature: -30°C~+60°C storage humidity: 10~90%<br>(non-condensation)                   |



## Router Specification

| Wireless           |   |  |  |
|--------------------|---|--|--|
| Standards          | IEEE 802.11b, IEEE 802.11g, IEEE 802.11n  |  |  |
| Signal Rate        | Up to 300Mbps   |  |  |
| Frequency Range    | 2.4–2.4835GHz   |  |  |
| Transmit Power     | 20dBm(MAX)  |  |  |
| Data Transfer Rate | <ul> <li>802.11n:</li> <li>40MHz (300Mbps, 270Mbps, 240Mbps, 180Mbps,</li> <li>120Mbps, 90Mbps, 60Mbps, 30Mbps)</li> <li>20MHz (144Mbps, 130Mbps, 115Mbps, 86Mbps, 57Mbps,</li> <li>43Mbps, 28Mbps, 14Mbps) (Auto–Sense)</li> <li>801.11g:</li> <li>(54Mbps, 48Mbps, 36Mbps, 24Mbps, 18Mbps, 12Mbps,</li> <li>11Mbps, 9Mbps, 6Mbps)</li> <li>802.11b:</li> <li>(11Mbps, 9Mbps, 6Mbps, 5.5Mbps, 2Mbps, 1Mbps)</li> </ul> |  |  |
| Wireless Mode      | AP, Repeater, AP+WDS, WDS, Client, Multi-SSID   |  |  |
| Wireless Security  | 64/128–bit WEP,<br>WPA–PSK/WPA2–PSK (TKIP/AES)<br>SSID Broadcast Enable/Disable<br>Wireless MAC Filtering   |  |  |
| Hardware           |   |  |  |
| Standards          | IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX   |  |  |



Т

| Interface        | 1 * 10/100Mbps Auto MDI/MDIX RJ45 WAN port<br>2 * 10/100Mbps Auto MDI/MDIX RJ45 LAN port  |  |  |
|------------------|---|--|--|
| LED              | PWR, WLAN, LAN1–LAN4, WAN, WPS  |  |  |
| Button           | WPS, Default  |  |  |
| Antenna          | 4 * 5dBi Fixed Antenna  |  |  |
| Power Supply     | DC 9V/500mA (Output)  |  |  |
| Software         |   |  |  |
| WAN Type         | DHCP, Static IP, PPPoE, L2TP, PPTP, Dual Access, WISP   |  |  |
| Port Forwarding  | Virtual Servers, Port Triggering, UPnP, DMZ, FTP Private<br>Port  |  |  |
| QoS              | WMM, Bandwidth Control  |  |  |
| Access Control   | IP/MAC/Domain Filtering   |  |  |
| VPN Pass-through | PPTP, L2TP, IPSec   |  |  |
| Others           | IPTV, Dynamic DNS, Static Routing, WOL, Backup & Restore,<br>Firmware Upgrade   |  |  |
| Others           |   |  |  |
| Certification    | FCC, CE   |  |  |
| Environment      | Operating Temperature: 0°C~40°C<br>Storage Temperature: –40°C~70°C<br>Operating Humidity: 10%~90% non–condensing<br>Storage Humidity: 5%~90% non–condensing |  |  |
| Package          | 1* FHW11<br>1* 9V/500mA Power Adapter<br>1* Quick Installation Guide (Multilingual)   |  |  |

٦



### Application

