

# Datasheet

Huawei HG8247W5, an intelligent routing-type ONT

## Overview

The Huawei EchoLife HG8247W5 is a routing-type ONT in the Huawei all-optical access solution. It uses the GPON technology to implement ultra-broadband access for users.

It provides 4 GE+2 POTS+1CATV+1 USB+2 WiFi(4 GE ports, 2 POTS ports, 1CATV port, 1 USB port and 2.4G&5G WiFi port). The high forwarding performance ensures the user experience of voice, data and HD video services, and provides customers with an ideal all-optical access solution and future-oriented service support capability.

- Smart service
- Smart interconnection
- Smart O&M



## Device Parameters

<b>Dimensions (H x W x D) (without external antenna and pads)</b>	34 mm x 225 mm x 147 mm	<b>Static power consumption</b>	6.8 W
<b>Weight</b>	About 300 g	<b>Maximum power consumption</b>	24 W
<b>Operating temperature</b>	0°C to 40°C	<b>NNI</b>	GPON
<b>Operating humidity</b>	5% RH to 95% RH (non- condensing)	<b>UNI</b>	4GE + 2POTS +1CATV + 1USB + 2.4G/5G Wi-Fi
<b>Power adapter input</b>	100–240 V AC, 50/60 Hz	<b>Optical Connector</b>	SC/APC
<b>System power supply</b>	11–14 V DC, 2 A	<b>Indicators</b>	Power/PON/LOS/LAN/TEL/U SB/WLAN/WPS/CATV

## Interface Parameters

<b>GPON port</b>	<b>WLAN</b>
<ul style="list-style-type: none"> <li>• Class B+</li> <li>• Receiver sensitivity: -27 dBm</li> <li>• Overload optical power: -8 dBm</li> <li>• Wavelengths: US 1310 nm, DS 1490 nm</li> <li>• Wavelength blocking filter (WBF) of G.984.5</li> <li>• Flexible mapping between GEM Port and TCONT</li> <li>• GPON: consistent with the SN or password</li> <li>• authentication defined in G.984.3</li> <li>• Bi-directional FEC</li> <li>• SR-DBA and NSR-DBA</li> </ul>	<ul style="list-style-type: none"> <li>• IEEE 802.11 b/g/n (2.4G)</li> <li>• IEEE 802.11 a/n/ac (5G)</li> <li>• 2 x 2 MIMO (2.4G)</li> <li>• 4 x 4 MIMO (5G)</li> <li>• Antenna gain: 5 dBi</li> <li>• WMM/Multiple SSIDs/WPS</li> <li>• 2.4G&amp;5G concurrent</li> <li>• Air interface rate: 300 Mbit/s (2.4G), 1733 Mbit/s (5G)</li> </ul>
<b>Ethernet port</b>	<b>POTS port</b>
<ul style="list-style-type: none"> <li>• Ethernet port-based VLAN tags and tag removal</li> <li>• 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission</li> <li>• QinQ VLAN</li> <li>• Limit on the number of learned MAC addresses</li> <li>• MAC address learning</li> <li>• Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s</li> </ul>	<ul style="list-style-type: none"> <li>• Maximum REN: 4</li> <li>• G.711A/μ, G.729a/b and G.722 encoding/decoding</li> <li>• T.30/T.38/G.711 fax mode</li> <li>• DTMF</li> <li>• Emergency calls (with the SIP protocol)</li> </ul>
<b>USB port</b>	<b>CATV port</b>
<ul style="list-style-type: none"> <li>• USB2.0</li> <li>• FTP-based network storage</li> <li>• File/Print sharing based on SAMBA</li> <li>• DLNA function</li> </ul>	<ul style="list-style-type: none"> <li>• Frequency Range 54 MHz to 1000 MHz</li> <li>• Output resistance 75 ohms</li> <li>• Received average optical power: -8dBm to +2dBm</li> <li>• RF output power: ≥17dBmV/Ch (With RF source analog channel power input = 20dBmV/ch, and 40 analog / 63 digital channels (4.3% OMI analog, 2.15 % digital))</li> </ul>


# Product Function

<b>Layer 3 features</b> <ul style="list-style-type: none"> <li>• PPPoE/Static IP/DHCP</li> <li>• NAT/NAPT</li> <li>• Port forwarding</li> <li>• ALG, UPnP</li> <li>• DDNS/DNS server/DNS client</li> <li>• IPv6/IPv4 dual stack, and DS-Lite</li> <li>• Static/Default routes</li> <li>• Multiple services on one WAN port</li> </ul>	<b>Smart O&amp;M</b> <ul style="list-style-type: none"> <li>• IPTV video quality diagnosis</li> <li>• eMDI</li> <li>• Rogue ONT detection and isolation from the OLT</li> <li>• Call emulation, and circuit test and loop-line test</li> <li>• PPPoE/DHCP simulation testing</li> <li>• WLAN emulation</li> </ul>	<b>Smart interconnection</b> <ul style="list-style-type: none"> <li>• Smart Wi-Fi coverage</li> <li>• SIP/H.248 auto-negotiation</li> <li>• Any port any service</li> <li>• Parental control</li> <li>• L2/L3 (IPv4) forwarding: 1G uplink, 2G downlink</li> </ul>	<b>QoS</b> <ul style="list-style-type: none"> <li>• Ethernet port rate limitation</li> <li>• 802.1p priority</li> <li>• SP/WRR/SP+WRR</li> <li>• Broadcast packet rate limitation</li> </ul> <b>Common O&amp;M</b> <ul style="list-style-type: none"> <li>• OMCI/Web UI/TR069</li> <li>• Variable-length OMCI messages</li> <li>• Dual-system software backup and rollback</li> </ul>
<b>Smart service</b> <ul style="list-style-type: none"> <li>• Scheduled Wi-Fi shutdown</li> <li>• Smart Wi-Fi sharing: Portal/802.1x authentication SoftGRE-based sharing</li> <li>• Association of one account with two POTS ports</li> </ul>	<b>Security</b> <ul style="list-style-type: none"> <li>• SPI firewall</li> <li>• Filtering based on MAC/IP/URL addresses</li> </ul> <b>Multicast</b> <ul style="list-style-type: none"> <li>• IGMP v2/v3 proxy/snooping</li> <li>• MLD v1/v2 snooping</li> </ul>	<b>Power saving</b> <ul style="list-style-type: none"> <li>• Indicator power saving</li> <li>• COC V6</li> </ul> <b>Smart Wi-Fi coverage</b> <ul style="list-style-type: none"> <li>• Configuration-free and PnP for Wi-Fi auxiliary devices (AP)</li> </ul>	<b>Home network feature</b> <ul style="list-style-type: none"> <li>• Visualized home network management</li> <li>• User-defined bandwidth allocation</li> <li>• Band steering</li> <li>• MU MIMO</li> <li>• Wi-Fi optimization &amp; Wi-Fi roaming</li> <li>• Wi-Fi O&amp;M</li> <li>• Beamforming</li> </ul>

Copyright © Huawei Technologies Co., Ltd. 2019. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

## Trademarks and Permissions

 HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

## Notice

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

## Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base Bantian, Longgang Shenzhen 518129 People's Republic of China

Website: <http://www.huawei.com>