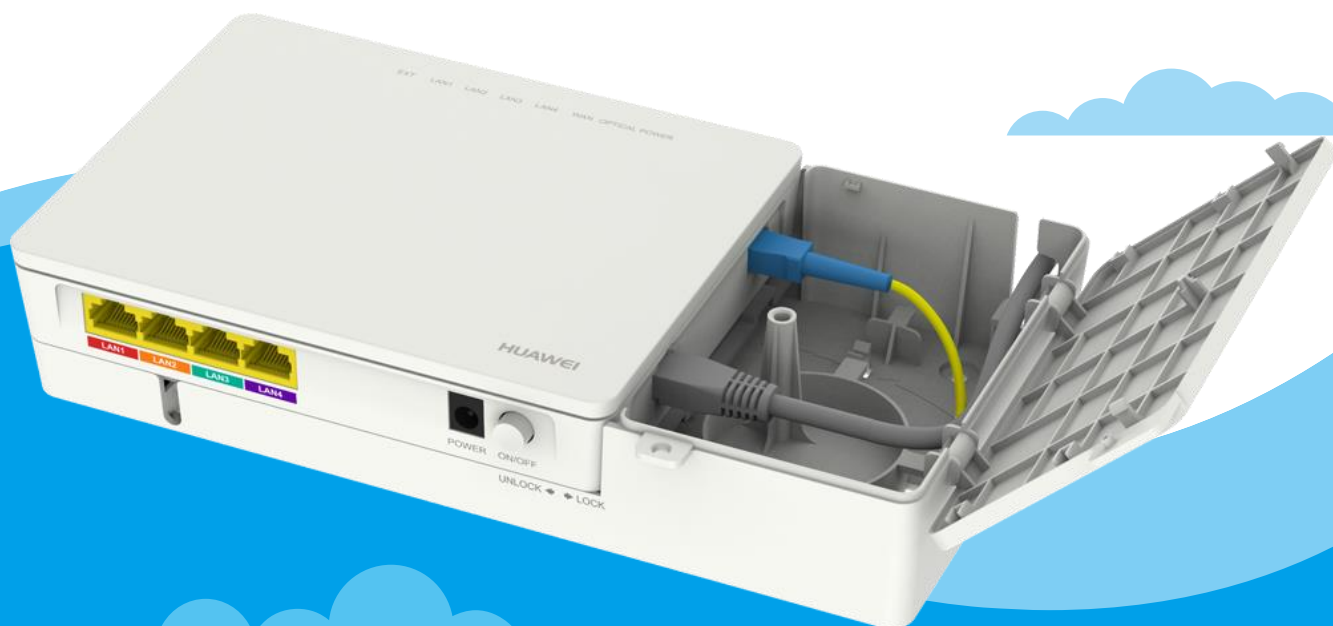# A Smarter Way
for Your Broadband Life

Huawei HG8050P, an intelligent P2P ONT

Smart service, interconnection, and O&M

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Device Parameters

Dimensions (D x W x H) (mm)	162 x 116 x 28 239 x 122 x 45 (with fiber tray)	Power adapter output	12V DC, 1 A
Weight	< 500 g	Static power consumption	6 W
Operating temperature	0°C to 40°C	Maximum power consumption	7.5 W
Operating humidity	5% RH to 95% RH (non-condensing)	Ports	NNI: GE optical port or GE electrical port UNI: 4GE+1GE*
Power adapter input	100 ~ 240 V AC, 50/60 Hz	Indicators	EXT/LAN/WAN/OPTICAL/ POWER

Remarks: when the GE optical port is used for upstream transmission, the GE electrical port can be used for downstream transmission.

Interface Parameters

Optical Interface

- Standard optical interfaces
- Maximum reach:20km
- Comply with SFF-8472
- Wavelengths: US 1310 nm, DS 1490 nm
- Minimum receiver sensitivity: -23.5dBm
- Maximum overload optical power: -6dBm

WAN Interface

- 1000 Base-X optical interface
- 10/100/1000 Base-T Ethernet port (with an RJ-45 connector)

LAN Interface

- Four 10/100/1000 BASE-T Ethernet ports (each with an RJ-45 connector), complying with IEEE 802.3u/802.3x
- Automatic MDI/MDIX and speed sensing
- EXT1 10/100/1000 BASE-T port (with an RJ-45 connector)
- Automatic MDI/MDI-X and speed sensing

LED Indicators

Power indicator:
- On (green): powered on
- On (red): faulty hardware
- Off: powered off

Optical indicator:
- Off: normal
- Blinking: abnormal

WAN indicator:
- Off: powered off or network port not connected
- Blinking: data transmitted
- On (green): connected to a 1000 Mbit/s network

EXT/LAN indicators 1 to 4:
- Off: powered off or network port not connected
- On: network port connected but no data transmitted
- Blinking: data transmitted

Product Function

Layer 2 features	• Ethernet port-based VLAN tags and tag removal • Unicast packet forwarding by MAC address + VLAN • MAC address learning and aging • BPDU transparent transmission by default	Layer 3 features	• Static IP address configuration for route WAN interfaces • PPPoE clients and IP address obtaining for route WAN interfaces through PPPoE • DHCP clients and IP address obtaining for route • WAN interfaces through DHCP • DHCP client with options for auto and upgrade • Specify 802.1p for route WAN interfaces • Copy IPTOS to 802.1p for route WAN interfaces
Multicast	• Fast leaving • IGMP V2&V3 snooping • Packet filtering and forwarding by VLAN + multicast MAC address • Up to 255 multicast groups • Limitation on the rate of IGMP messages • MLDv1 messages in Query, Report, and Done states • MLDv2 messages in Query and Report states • MLD snooping in IPv6 L2 transparent transmission	QoS	Queue scheduling : • Eight SP queues
802.1ag	• Comply with the IEEE 802.1ag protocol/CFM • CC, LB, and LT functions • Alarm status and log recording for errors detected by CC • Transparent transmission of CFM high-level messages in upstream and downstream directions (VLAN translation rules are the same as those of common data packets.)	Security	• Anti-DoS attack • MAC address filtering • WAN-side ONT access based on IP address filtering
		Y.1731	• Single-ended ETH-LM (as the receiving MEP) • Two-way ETH-DM (as the receiving MEP)

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Product Function

O&M	• Management and configuration via Web/TR069/HTTP/HTTPS • ONT information query including: ·Product type, product description, software version, hardware version, CPU usage, and memory usage ·Optical status, transmit power, receive power, temperature, bias current, and voltage ·Ethernet port statistics, status including the port number, duplex mode, rate, and connection status • ACS URL configuration • Configuration of the SSL digital certificate of TR069 • Configuration file upload, backup, and download • Default configuration restoration • Device upgrade • Software dual backup and rollback • Log display and download • Fault information collection and download • Hardware fault detection • PING, TRACERT diagnosis, PPPoE dialing simulation, DHCP simulation • IPTV diagnosis

Visual Overview

LAN1 LAN2 LAN3 LAN4   POWER ON/OFF

UNLOCK ◄ ► LOCK

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EXT   LAN1   LAN2   LAN3   LAN4   WAN   OPTICAL POWER

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OPEN

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