

A Smarter Way for Your Broadband Life

Huawei HG8121H an intelligent routing-type ONT

Smart
service

Smart
interconnection

Smart O&M

○ Device Parameters

Dimensions (L x W x H)	176mm x 138mm x 26mm (without an external antenna)	System power supply	11–14 V DC, 1A
Weight	< 400 g	Static power consumption	5 W
Operating temperature	0°C to +40°C	Maximum power consumption	7.5 W
Operating humidity	5% RH to 95% RH (non-condensing)	Ports	1GE+1FE+1POTS+ Wi-Fi
Power adapter input	100 – 240 V AC, 50 – 60 Hz	Indicators	POWER/PON/LOS/FE/GE/TEL/ WLAN/WPS

○ Interface Parameters

GPON Port	Ethernet Port	WLAN	POTS Port
• Class B+ • Receiver sensitivity: -27dBm • Wavelengths: US 1310nm, DS 1490nm • Wavelength blocking filter (WBF) • Flexible mapping between GEM Port and TCONT • GPON: consistent with the SN or password authentication defined in G.984.3 • Bi-directional FEC • SR-DBA and NSR-DBA	• Ethernet port-based VLAN tags and tag removal • 1:1 VLAN, N:1 VLAN, or VLAN transmission • QinQ VLAN • Limit on the number of learned MAC addresses • MAC address learning	• IEEE 802.11 b/g/n • 2 x 2 MIMO • Antenna gain: 5 dBi • WMM • Multiple SSIDs • WPS • Air interface rate: 2. 4G: 300 Mbit/s	• Maximum REN: 4 • G.711A/μ, G.729a/b, and G.722 encoding/decoding • T.30/T.38/G.711 fax mode • DTMF • Emergency calls (with the SIP protocol)

○ Product Function

Smart interconnection	• Smart Wi-Fi coverage • Any port any service • Parental control • L2/L3(IPv4) forwarding: 1G uplink, 2G downlink • SIP/H.248 auto-negotiation	Smart service	Smart Wi-Fi sharing: • 802.1x authentication/Portal • SoftGRE-based sharing
Smart O&M	• IPTV video quality diagnosis • Variable-length OMCI messages • Active/Passive rogue ONT detection and isolation • PPPoE/DHCP simulation testing • Call emulation, and circuit test and loop-line test • WLAN emulation	Layer 3 Features	• PPPoE/Static IP/DHCP • NAT/NAPT • Port forwarding • ALG, UPnP • DDNS/DNS server/DNS client • IPv6/IPv4 dual stack, and DS-Lite • Static/Default routes • Multiple services on one WAN port
QoS	• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation	Security	• SPI firewall • Anti-DoS attack
Multicast	• IGMP v2/v3 snooping • IGMP v2/v3 proxy • MLD v1/v2 snooping • Multicast services through Wi-Fi	Common O&M	• OMCI/Web UI/TR069 • Dual-system software backup and rollback
		Power Saving	• Dynamic power saving • Indicator power saving • Scheduled Wi-Fi shutdown • COCv4