

A Smarter Way for Your Broadband Life

Huawei HN8255Ws, an intelligent XGS-PON routing-type ONT

Smart service

Smart
interconnection

Smart O&M



○ Device Parameters

Dimensions (H x W x D)	198 mm x 305 mm x 82.5 mm
Weight	< 1200 g
Operating temperature	0°C to 40°C
Operating humidity	5% RH to 95% RH (non-condensing)
Power adapter input	100-240 V AC, 50/60 Hz
System power supply	11-14 V DC, 4 A
Static power consumption	9.6 W
Maximum power consumption	46.5 W
NNI	XGS-PON (SFP+ Optical Module)
UNI	2 x POTS + 4 x GE + 1 x 10GE + 2.4G&5G Wi-Fi + 2 x USB
Indicators	Power/PON/LOS/TEL/10G LAN/ LAN/WLAN/WPS/USB

○ Interface Parameters

XGS-PON Port	- Class N1/N2 - Receiver sensitivity: -28 dBm - Wavelengths: US 1260-1280 nm, DS 1575-1580 nm - Wavelength blocking filter (WBF) - Flexible mapping between GEM Port and TCONT - SN/Password/SN+Password/Bi-directional authentication based on OMCI - upstream and downstream FEC - SR-DBA and NSR-DBA 10 Gbit/s upstream, 10 Gbit/s downstream
Ethernet Port	4 x GE + 1 x 10GE - Ethernet port-based VLAN tags and tag removal 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission - QinQ VLAN - Limitation on the number of learned MAC addresses - MAC address learning
POTS Port	- 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)
USB Port	- USB2.0 - USB3.0 - FTP-based network storage - File/Print sharing based on SAMBA - DLNA DMS/UPnP AV (media server)

○ Interface Parameters

Wi-Fi

- IEEE 802.11 b/g/n (2.4G)
 - IEEE 802.11 a/n/ac (5G)
 - 3×3 MIMO (2.4G)
 - 4×4 MU-MIMO (5G)
 - Antenna gain: 2 dBi
 - 2.4-2.4835 GHz EIRP 100 mW
 - 5.15-5.25 GHz/5.25-5.35 GHz EIRP 200 mW;
 - 5.47-5.725 GHz EIRP 1000 mW
- Note: These are EIRP values in the CE standard.
- WMM (Wi-Fi Multi Media)
 - Multiple SSIDs
 - WPS
 - 2.4G/5G concurrent
 - Air interface rate: 2. 4G: 450 Mbit/s
 - 5G: 1733 Mbit/s

○ Product Functions

Smart Interconnection

- Smart Wi-Fi coverage
- SIP/H.248 auto-negotiation
- Any port any service
- Parental control

Smart Service

- Smart Wi-Fi sharing: Portal/802.1x authentication
- SoftGRE-based sharing
- Association of one account with two POTS ports

Smart O&M

- IPTV video quality diagnosis
- Variable-length OMCI messages
- Call emulation, and circuit test and loop-line test
- PPPoE/DHCP simulation testing
- Wi-Fi emulation
- One-click diagnosis (Web)

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

Multicast

- IGMP v2/v3 proxy/snooping
- MLD v1/v2 snooping
- Multicast services through Wi-Fi

O Product Functions

Home Network

- Home network control center
- Configuration synchronization to distributed PnP APs
- Wi-Fi signal optimization within the home network
- Wi-Fi roaming within the home network
- Band steering
- Beamforming
- Wi-Fi video QoS improvement

QoS

- Ethernet port rate limitation
- 802.1p priority
- SP/WRR/SP+WRR

Security

- SPI firewall
- Filtering based on MAC/IP addresses

Common O&M

- OMCI/Web UI/TR069
- Dual-system software backup and rollback

Power Saving

- COC V5
- Scheduled Wi-Fi shutdown