Huawei OptiXstar HN8145X6

Huawei OptiXstar HN8145X6 is a routing-type Optical Network Terminal (ONT) that uses 10-Gigabit-capable Passive Optical Network (XG-PON) technology to offer ultra-broadband access, high performance, and wide coverage for users. With high forwarding performance guaranteeing a high-quality experience for both voice and data services — plus future-oriented service support capabilities — OptiXstar HN8145X6 helps enterprises deploy competitive all-optical access solutions.

The device features four GE ports, one POTS port, one USB port, and 2.4G and 5G Wi-Fi 6 connectivity.

Next Generation Wi-Fi 6

IEEE 802.11 b/g/n/ax (2.4G).
IEEE 802.11 a/n/ac/ax (5G).
2 x 2 MIMO (2.4G and 5G).
Antenna gain: 5 dBi.
Air interface rate: 574 Mbit/s (2.4G), 2.402 Gbit/s (5G).

Smart Services

Scheduled Wi-Fi shutdown scheduling.
Smart Wi-Fi sharing: Portal/802.1X authentication, and SoftGRE-based sharing.

Smart O&M

IPTV video quality diagnosis.
eMDI.
Rogue ONT detection and self-regulation.
Call emulation, circuit test, and loop-line test.
PPPoE/DHCP simulation testing.
WLAN emulation.

Specifications

ParametersParameters	Huawei OptiXstar HN8145X6
Dimensions (H x W x D)	40 x 185 x 120 mm (without external antenna and pads)
Weight (Without Power Adapter)	Approximately 400 g
Operating Temperature	0–40°C
Operating Humidity	5–95% RH (non-condensing)
Power Adapter Input	100–240 V AC, 50/60 Hz
System Power Supply	11–14 V DC, 1.5 A
UNI	4 x GE, 1 x POTS, 1 x USB, 2.4G/5G Wi-Fi 6
NNI	XG-PON
Maximum Power Consumption*	18 W
Antenna	External antenna
Installation Mode	Desktop
XG-PON Port	• SC/UPC • Class N1/N2a/E1 • Receiver sensitivity: –28 dBm • Wavelengths: US 1260–1280 nm, DS 1575–1580 nm • Wavelength Blocking Filter (WBF) • Flexible mapping between the GEM port and TCONT • SN/Password/SN + Password/Bi-directional authentication based on OMCI • Upstream and downstream FEC • SR-DBA and NSR-DBA

	• 2.5 Gbit/s upstream, 10 Gbit/s downstream
Ethernet Electrical Port	• Ethernet port-based VLAN tags and tag removal • 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission • QinQ VLAN • Limit on the number of learned MAC addresses • MAC address learning • Auto port speeds (10/100/1000 Mbit/s)
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)
WLAN	• IEEE 802.11 b/g/n/ax (2.4G) • IEEE 802.11 a/n/ac/ax (5G) • 2 x 2 MIMO (2.4G) • 2 x 2 MIMO (5G) • Antenna gain: 5 dBi • WMM/Multiple SSIDs/WPS • 2.4G and 5G concurrency • Air interface rate: 574 Mbit/s (2.4G), 2.402 Gbit/s (5G) • Beamforming • Band steering • DL OFDMA • DL MU-MIMO • 1024 QAM • 160 MHz frequency bandwidth • WPA3
USB Port	• USB 2.0 • FTP-based network storage • File/Print sharing based on SAMBA • DLNA function
Power Saving	COC V7