

# HG4146HT

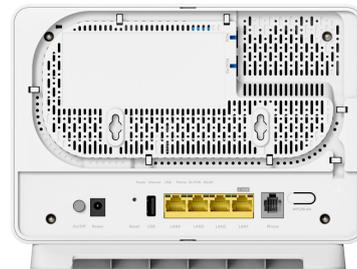
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**Ultra-High Bandwidth | Smart O&M**  
**Smart Interconnection | Smart Service**



## Overview

HG4146HT is the FTTR main gateway of FiberHome's all optical network solution, which implements wideband access for users through GPON technology. The FTTR main gateway provides GPON downlink interfaces, GE/2.5GE Ethernet interfaces, VoIP telephone interfaces, Wi-Fi 7, USB and other interfaces. Its downstream GPON interface can access up to 16 sub gateways, greatly improving network coverage, wireless performance, and user experience, providing customers with richer services such as home communication, home entertainment, and smart home.



## Physical Parameters

Type	Instruction
Dimensions	220mm × 150mm × 33.5mm
Weight	460g
Operating Temperature	0°C~45°C
Storage Temperature	-20°C~70°C
Operating Humidity	5%~95%(no condensation)
System Power Supply	DC 12V, 1.5A
Power Adapter input	AC 100~240V, 50~60Hz
Power Consumption	≤ 18W
Ports	Uplink GPON Downlink 1*GPON+1*2.5GE+3*GE+1*POTS+1*USB+Wi-Fi 7 BE3600
Indicators	Power/PON/Internet/Phone/USB/WLAN/Dn PON
Memory	256MB Flash, 512MB RAM

## Interfaces Parameters

Type	Instruction
GPON Port	Supports GEM encapsulation & Ethernet over GEM
	Flexible mapping between GEM and TCONT
	Bi-direction FEC and downlink FEC performance statistics
	SR-DBA or NSR-DBA, DBA piggy-back DBRu Mode 0
	Multiple encryption modes: unicast data channel, AES-128, OMCI channel, negotiation with OLT
	Multiple authentication modes: SN, Password, SN + Password and LOID
	Class B+
	Receiver sensitivity: -28dBm
	Overload optical power: -8dbm
	Wavelengths: US 1310nm, DS 1490nm
Supports ITU-T G.984 standard	

Type	Instruction
Ethernet Port	Supports the IEEE 802.1Q VLAN standard Ethernet port-based VLAN tags and tag removal
	1:1VLAN, N:1 VLAN or VLAN transparent transmission
	Supports learning MAC addresses
	Supports Layer 2 / Layer 3 wire-speed forwarding
	Supports bandwidth control granularity of 64 kbit/s

Type	Instruction
Wi-Fi Port	IEEE 802.11 b/g/n/ax/be (2.4G)
	IEEE 802.11 a/n/ac/ax/be (5G)
	Dual band: 2.4G(2*2MIMO) and 5G(2*2MIMO) , 5G band 160MHz bandwidth
	8 SSIDs(4+4)
	Supports Open System, Shared Key, WPA-PSK, WPA2- PSK, WPA3-SAE and WPS Authentication
	Supports automatic selection and manual configuration of channels
	Theoretical air interface rate: : 689 Mbit/s (2.4G). 2822 Mbit/s(5G)

Type	Instruction	Type	Instruction
POTS Port	Supports SIP protocol	USB	Compliant with the USB 2.0 standard
	G.711A/U, G.729A/B and G.722 encoding/decoding		
	DTMF detection and RFC 2833 for transmitting/receiving DTMF		FTP-based network storage

## Product Function

Type	Instruction
Smart O&M	OMCI/Web UI/TR-069
	Supports automatic service provisioning, management and software upgrade remotely based on OMCI/TR-069
	Supports delivering the XML configuration file via the TR-069
	Supports alarm synchronization and performance statistics

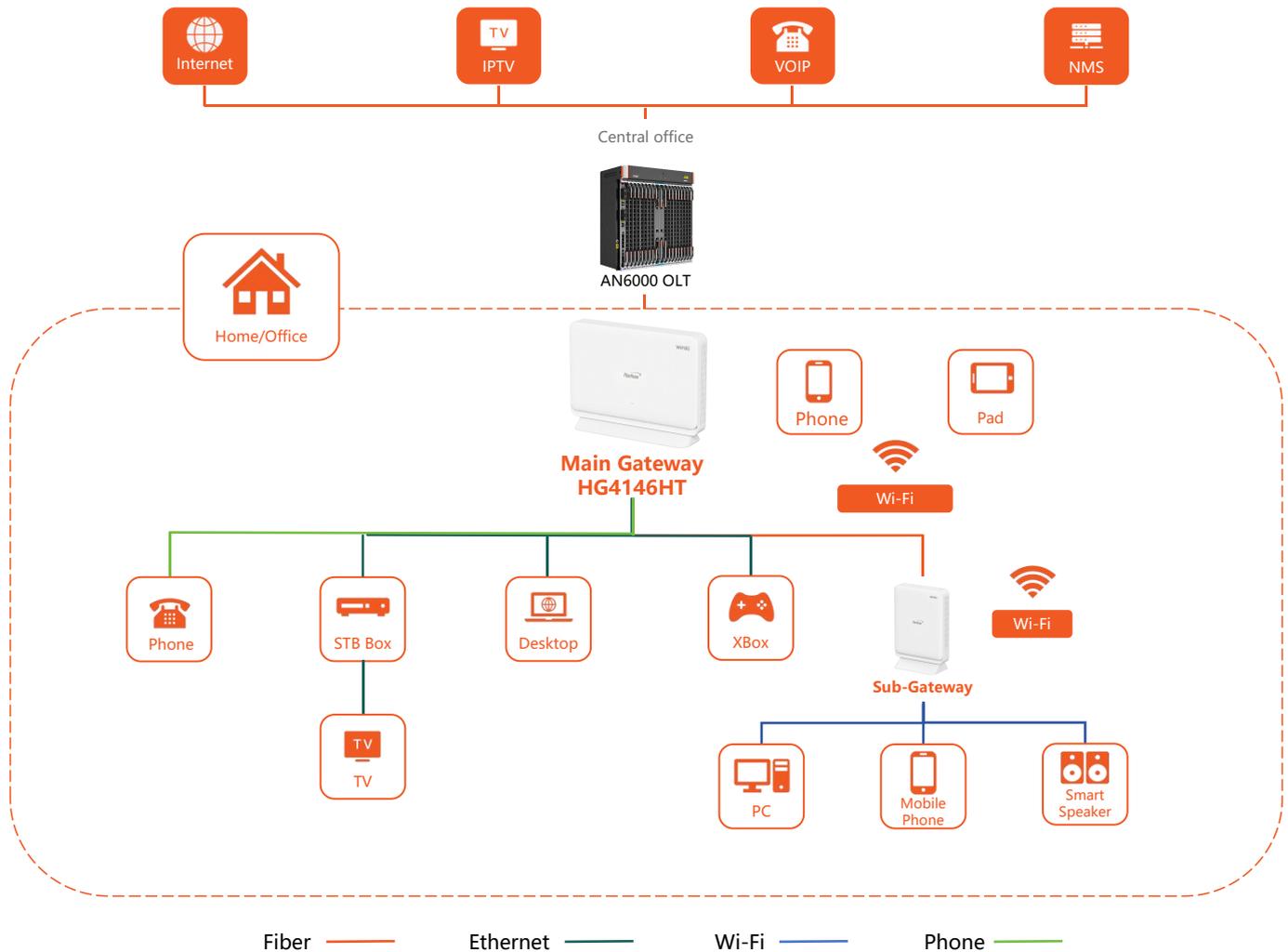
Type	Instruction
Smart Service	Triple play service: HIS, IPTV, Voice
	Flexible connection modes: Wire(GE/2.5GE/POTS) + Wi-Fi
	Powerful QoS: <ul style="list-style-type: none"> <li>• 802.1p Priority</li> <li>• SP/WRR/SP+WRR</li> </ul>

Type	Instruction
L3 Features	IPv4/IPv6 dual stack, and DS-Lite
	PPPoE/Static/DHCP
	NAT/NAPT
	DDNS/DNS Relay
	Static/default routes

Type	Instruction
Smart Interconnection	GE Port 100M/1000M auto-negotiation; 2.5GE Port 1000M/2.5GE auto-negotiation
	IPv4/IPv6 auto-negotiation
	Easy to connect to other vendors' OLT
	Easy to connect to ACS by TR-069

Type	Instruction	Type	Instruction
Security	Anti-DoS attack	Multicast	IGMP v2/v3 snooping
	Firewall and ACL function		MLD v1/v2 snooping
	Filtering based on MAC/IP/URL address		Up to 256 multicast groups

# Networking Topology



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