

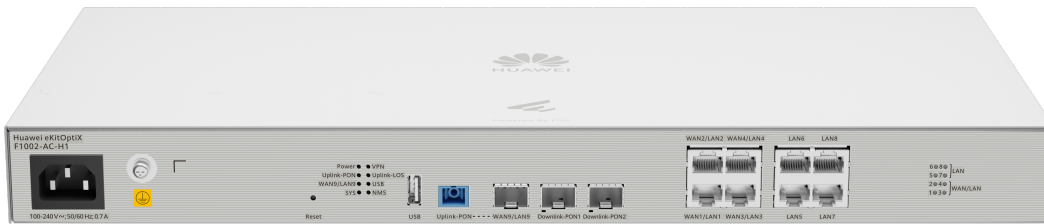
F1002-AC-H1 Datasheet

Date: 2024-11-26

Overview

Huawei eKitOptiX F1002-AC-H1 is an enterprise optical gateway. The device provides optical port and Ethernet ports in the uplink direction, and optical ports, Ethernet ports, and USB port in the downlink direction.

- Automatic networking with optical APs, plug-and-play, supports Wi-Fi roaming, the roaming handover delay is 50 ms.
- Connect 256 ONU/Optical APs, maximum of 1000 devices connected.
- The security-based 1 Gbit/s IPSec VPN access is implemented. The hardware encryption engine ensures tunnel performance and data security.



NOTE

- The schematic diagrams in this document may differ from the actual product.
- The optical gateway does not provide Wi-Fi itself, but can configure Wi-Fi for downstream optical APs. That is, you can configure Wi-Fi parameters on the optical gateway. These Wi-Fi parameters are then automatically synchronized to downstream optical APs.
- Automatic Wi-Fi channel selection under the same optical gateway
- Downstream optical APs Wi-Fi roaming(User terminals must support 802.11k/802.11v)

Hardware Specifications

| Specification | Parameters |
|-------------------------------|--|
| Dimensions (H x W x D) | 442mm × 220mm × 43.6mm |
| NNI | <p>1 × XGS-PON/XG-PON(BOB) or 1 × GE/10 GE(SFP)(WAN/LAN multiplexing) + 4 × GE(WAN/LAN multiplexing)</p> <p>NOTE</p> <ul style="list-style-type: none"> • When the XGS-PON/XG-PON(BOB) port is used for upstream transmission, the GE/10 GE (SFP) port is unavailable. • When the GE/10 GE (SFP) port is used for upstream transmission, the XGS- |

| Specification | Parameters |
|-----------------------------------|---|
| | PON/XG-PON/GPON(BOB) port is unavailable. |
| UNI | <p>4 × GE + 4×GE (WAN/LAN multiplexing) + 1 × 10 GE/GE(SFP)(WAN/LAN multiplexing) + 2 × GPON/XGS-PON & GPON Combo (SFP) + 1 × USB3.0*</p> <p>NOTE</p> <ul style="list-style-type: none"> *: plug-and-play USB port reserved for users. WAN1/LAN1~WAN4/LAN4 are WAN/LAN multiplexing. LAN5 to LAN8 share 1 Gbit/s bandwidth. |
| Rated power supply | AC: 100 – 240V AC, 50/60 Hz, 0.7 A |
| Static power consumption | 14.71 W |
| Maximum power consumption | 24.62 W |
| Operating temperature | -10°C to +55°C |
| Operating humidity | 5% RH – 95% RH, non-condensing |
| Weight (excluding adapter) | About 2.25kg |
| Protection rating | IP20 |
| Surge protection | AC power supply: 6 kV in common mode and 6 kV in differential mode GE: 4 kV in common mode |
| Heat dissipation | Fan cooling |
| Installation mode | Desktop, 19-inch cabinet, and network box |

Port Parameters

| Name | Parameter |
|--------------------------------|--|
| Uplink-PON | <ul style="list-style-type: none"> Port mode: XGS-PON <ul style="list-style-type: none"> Port type: SC/UPC Standards compliance: ITU-T G.9807.1, Class N1/N2 Receiver sensitivity: -28 dBm Overload optical power: -9 dBm Transmission rate: 9.953 Gbit/s downstream and 9.953 Gbit/s upstream Port mode: XG-PON <ul style="list-style-type: none"> Port type: SC/UPC Class N1/N2a Receiver sensitivity: -28dBm Overload optical power: -8dBm Transmission rate: 9.953 Gbit/s downstream and 2.488 Gbit/s upstream |
| WAN9/LAN9 | <p>Supports GE and 10GE optical modules</p> <p>NOTE</p> <ul style="list-style-type: none"> GE/10GE (RJ45) optical modules are not supported. A single-mode optical module with a wavelength of 1310nm must be used in conjunction. It is recommended to use the Huawei-compatible optical module, with the BOM code 34060599. |
| Downlink-PON1–Downlink- | Supports GPON/XGS-PON&GPON Combo optical modules |

| Name | Parameter |
|--|---|
| PON2 | |
| WAN1/LAN1–WAN4/LAN4 LAN5–LAN8 | <ul style="list-style-type: none"> • RJ-45 port • Standards compliance: IEEE802.3 • 10/100/1000 Mbit/s auto-sensing • Half duplex/full duplex auto-negotiation and configuration • VLAN tagging/tag removal based on Ethernet port |
| USB | USB 3.0 |


Product Functions

| Feature | Description |
|---------------------------------------|---|
| Automatic service provisioning | <ul style="list-style-type: none"> • OMCI/Web UI/TR069 • PPPoE/DHCP simulation |
| L3 features | <ul style="list-style-type: none"> • Default/Static/Policy/Service route • VLAN binding • ALG/UPnP/ARP • DDNS/DMZ/DNS/NAPT • PPPoE/Static IP address/DHCP • Port mapping/Port trigger • IPv6 |
| Security | <ul style="list-style-type: none"> • IPv6/IPv4 firewall • MAC address filtering/IP address filtering • Anti-DoS/anti-ARP attack • Port-level MAC address and IP address binding • Device access control • Local Portal authentication |
| Multicast | <ul style="list-style-type: none"> • IGMP v2/v3 snooping • Dynamic controllable multicast • IGMP proxy • MLDv1/MLDv2 snooping |
| QoS | <ul style="list-style-type: none"> • Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR |
| VPN | <ul style="list-style-type: none"> • L2TP VPN • VXLAN tunnel • IPsec encryption |
| Layer 2 management | <ul style="list-style-type: none"> • DHCP Option82 • PITP • BPDU transparent transmission • LLDP |

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