

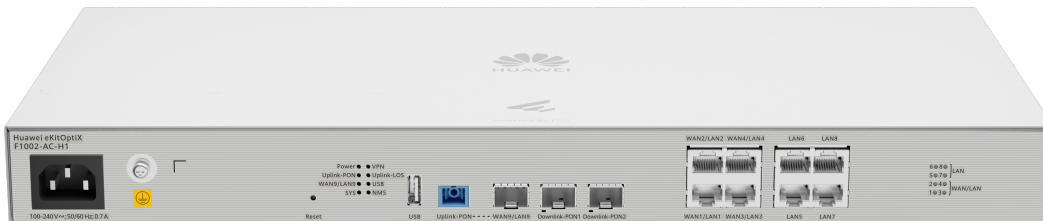
F1002-AC-H1 Datasheet

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 × 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 XGE (SFP) port is unavailable. • When the XGE (SFP) port is used for upstream transmission, the XGS-PON/XG-

Specification	Parameters
	PON (BOB) port is unavailable.
UNI	<p>4 × GE + 4×GE (WAN/LAN multiplexing) + 1 × 10 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> <p>GE (RJ45) optical modules are not supported.</p>
Downlink-PON1–Downlink-PON2	Supports GPON/XGS-PON&GPON Combo optical modules
WAN1/LAN1–WAN4/LAN4	<ul style="list-style-type: none"> RJ-45 port

Name	Parameter
LAN5–LAN8	<ul style="list-style-type: none"> 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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Huawei Technologies Co., Ltd.

Address: Huawei Industrial Base Bantian,
Longgang Shenzhen 518129 People's
Republic of China

Website: <https://eKit.huawei.com>