

1G1F+WIFI+CATV

QF-CX101WC

Overview

- 1G1F+WIFI+CATV is designed as HGU (Home Gateway Unit) in different FTTH solutions; the carrier-class FTTH application provides data service access.
- 1G1F+WIFI+CATV is based on mature and stable, cost-effective XPON technology. It can switch automatically with EPON and GPON mode when it access to the EPON OLT or GPON OLT.
- 1G1F+WIFI+CATV adopts high reliability, easy management, configuration flexibility and good quality of service (QoS) guarantees to meet the technical performance of the module of China Telecom EPON CTC3.0.
- 1G1F+WIFI+CATV is compliant with IEEE802.11n STD, adopts with 2x2 MIMO, the highest rate up to 300Mbps.
- 1G1F+WIFI+CATV is fully compliant with technical regulations such as ITU-T G.984.x and IEEE802.3ah.
- 1G1F+WIFI+CATV is designed by Realtek chipset 9602C.

Feature

- Supports Dual Mode (can access GPON/EPONOLT).
- Supports SFU and HGU of EPON CTC 3.0 standard
- Supports GPON G.984/G.988 standards and IEEE802.3ah.
- Support CATV interface for Video Service and remote control by Major OLT
- Support 802.11n WIFI (2x2 MIMO) function
- Support NAT, Firewall function.
- Support Flow & Storm Control , Loop Detection, Port Forwarding and Loop-Detect
- Support port mode of VLANconfiguration
- Support LAN IP and DHCP Server configuration
- Support TR069 Remote Configuration and maintenance
- Support Route PPPoE/DHCP/Static IP and Bridge mixed mode

- Support IPv4/IPv6 dual stack
- Support IGMPv2, IGMPv3, MLDv1, MLDv2, IGMP snooping/proxy
- Compatible with popular OLT(HW, ZTE, FiberHome...)

Specification

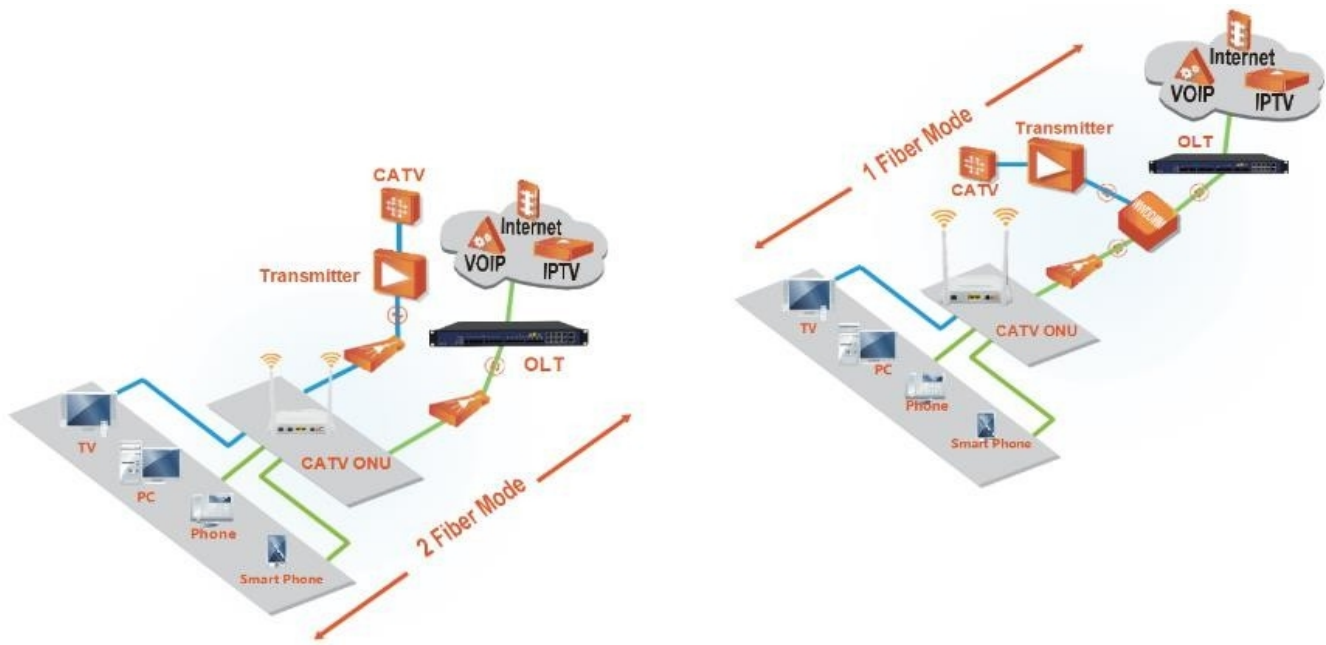
Technical Item	Details
PON interface	1 G/EPON port(EPON PX20+ and GPON Class B+) Upstream: 1310nm; Downstream: 1490nm SC/APC connector Receiving sensitivity: $\leq -28\text{dBm}$ Transmitting optical power: $0\sim +4\text{dBm}$ Transmission distance: 20KM
LAN interface	1x10/100/1000Mbps and 1x10/100Mbps auto adaptive Ethernet interfaces. Full/Half, RJ45 connector
WIFI Interface	Compliant with IEEE802.11b/g/n Operating frequency: 2.400-2.4835GHz support MIMO, rate up to 300Mbps 2T2R, 2 external antenna 5dBi Support: Multiple SSID Channel: 13 Modulation type: DSSS、CCK and OFDM Encoding scheme: BPSK、QPSK、16QAM and 64QAM
CATV Interface	RF, optical power : $+2\sim -18\text{dBm}$ Optical reflection loss: $\geq 45\text{dB}$ Optical receiving wavelength: $1550\pm 10\text{nm}$ RF frequency range: 47~1000MHz, RF output impedance: 75Ω RF output level: $\geq 82\text{dBuV}$ (-7dBm optical input) AGC range: $+2\sim -7\text{dBm}/-4\sim -13\text{dBm}/-5\sim -14\text{dBm}$ MER: $\geq 32\text{dB}(-14\text{dBm optical input}), > 35(-10\text{dBm})$
LED	9 LED, For Status of WIFI、WPS、PWR、LOS、PON、LAN1~LAN2、WORN、NORMAL(CATV)
Push-Button	4, for Function of Power on/off, Reset, WPS, WIFI
Operating condition	Temperature : $0^{\circ}\text{C}\sim +50^{\circ}\text{C}$ Humidity : $10\%\sim 90\%$ (non-condensing)
Storing Condition	Temperature : $-40^{\circ}\text{C}\sim +60^{\circ}\text{C}$ Humidity : $10\%\sim 90\%$ (non-condensing)
Power supply	DC 12V/1A
Power Consumption	$< 6\text{W}$
Net Weight	$< 0.3\text{kg}$

Panel lights and Introduction

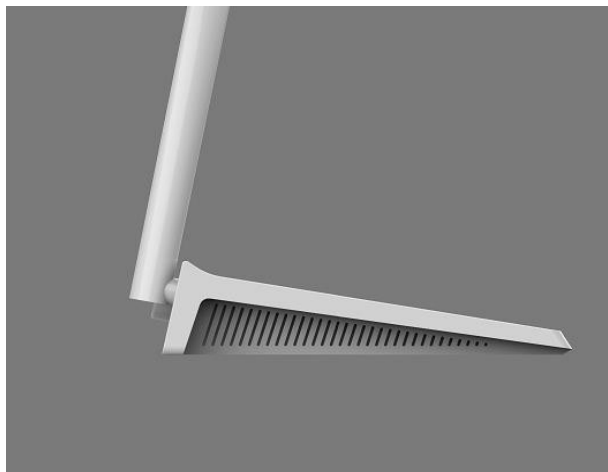
Pilot Lamp	Status	Description
WIFI	On	The WIFI interface is up.
	Blink	The WIFI interface is sending or/and receiving data (ACT).
	Off	The WIFI interface is down.
WPS	Blink	The WIFI interface is securely establishing a connection.
	Off	The WIFI interface does not establish a secure connection.
PWR	On	The device is powered up.
	Off	The device is powered down.
LOS	Blink	The device does not receive optical signals or with low signals.
	Off	The device has received optical signal.
PON	On	The device has registered to the PON system.
	Blink	The device is registering the PON system.
	Off	The device registration is incorrect.
LAN1~LAN2	On	Port (LANx) is connected properly (LINK).
	Blink	Port (LANx) is sending or/and receiving data (ACT).
	Off	Port (LANx) connection exception or not connected.
Worn (CATV)	On	Input optical power is higher than 3dbm or lower than -15dbm
	Off	Input optical power is between -15dbm and 3dbm
Normal (CATV)	On	Input optical power is between -15dbm and 3dbm
	Off	Input optical power is higher than 3dbm or lower than -15dbm

Application

- Typical Solution: FTTO(Office)、FTTB(Building)、FTTH(Home)
- Typical Service: Broadband Internet access, IPV, VOD, video surveillance, CATV etc.



Product Appearance



Ordering information

Product Name	Product Model	Descriptions
1G1F+WIFI+CATV XPON	Model Name: QF-CX101W Model Series No.: CX1102R002	10/100/1000Mbps auto adaptive Ethernet (RJ45) ,1 SC/APC Connector, Plastic Casing, External power supply adapter
1G1F+WIFI+CATV EPON	Model Name: QF-CE101W Model Series No.: CE1102R002	10/100/1000Mbps auto adaptive Ethernet (RJ45) ,1 SC/APC Connector, Plastic Casing, External power supply adapter