



FC2104C

4GE + POTS + WIFI5 AC1200

Product Overview

The FC2104C is a XPON optical terminal access device that is highly integrated with dual-frequency Wi-Fi5. It is the end-product of optical fiber for operator, which supports ultra-bandwidth access through G/EPON upstream technology, and provides users with basic WIFI functions, routing, VOIP, and gigabit Ethernet functions. The FC2104C upstream network ports are G/EPON ports. The downstream user ports include four GE electrical ports, one USB port, one VOIP port, and WiFi5 WLAN port.

Product Highlight

- 1 * XPON interface: SC/UPC (or SC/APC) interface, E/GPON standard
- 4 * Ethernet interface: 10/100/1000Mbps, RJ45, IEEE802.3-2005 standard
- 1 * VOIP interface: in accordance with G.711a/u, G.729a/b, G.722 standard
- 1 * Standard USB 2.0 interface
- Dual-band WIFI5 (2.4G :300Mbps, 5G: 867Mbps) (2×2 MIMO (2.4G&5G))

Solution Display

The PON system usually consists of the OLT at the office side, the ONU and the ODN at the user side, and adopts a point-to-multipoint network structure. The ODN consists of single-mode optical fibers and passive optical devices such as optical splitters and optical connectors. It provides the optical transmission medium for the physical connection between the OLT and ONU.Implement FTTX service deployment application.



Product Specification

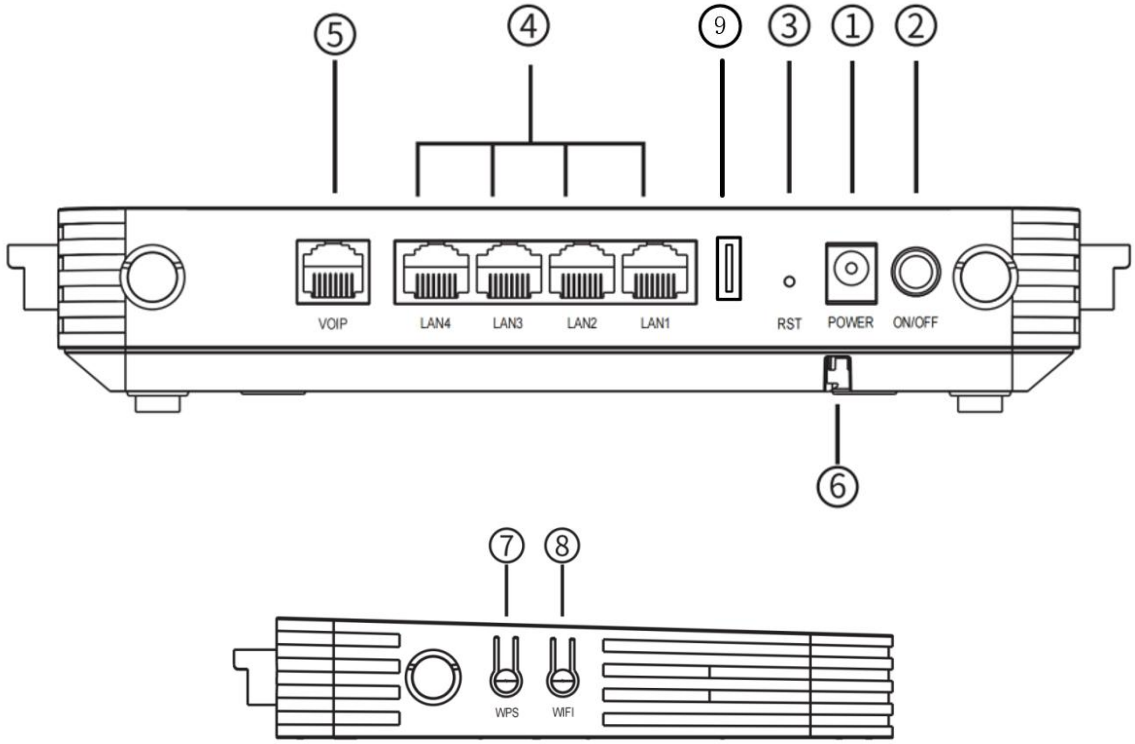
Hardware Specifications	Description
Port	4GE+1VOIP+1USB+WIFI5+G/EPON
LED	POWER+PON/LOS+INTERNET+LAN+VOIP+WiFi_2.4G +WiFi_5G+WPS+USB
Button	POWER+RST+WIFI+WPS
Flash&Memory	Flash: 64MB; Memory: 128MB;
Power Supply	12V/1A
Power Consumption	<12W
Environment Standard	Operating Temperature: -5~45℃ Storage Temperature: -20~70℃ Relative Humidity: 5%~95% (non-condensing)
Environment Friendly	RoHs、CE、CCC
Weight	0.35KG
Size and Weight	190mm*135mm*33mm, 0.35KG
PON Module type	Class B+, SC/UPC (or SC/APC)
wavelength	UP 1310nm, Down 1490nm
TX Optical power	0.5~4dBm
RX Optical sensitivity	-28dBm
Transmission distance	0~20km
Transmission rate	EPON: Upstream 1.25Gbps/Downstream 1.25Gbps GPON: Upstream 1.25Gbps/Downstream 2.5Gbps
LAN Interface type	RJ45(10/100/1000Mbps)
VOIP	RJ11
USB	USB 2.0
WIFI	Dual-band WIFI5 AC1200 (2×2 MIMO (2.4G&5G))

WiFi5 (AC1200)

Attributes		Description
	WiFi Protocol	2.4GHz supports 802.11b/g/n 5GHz supports 802.11a/n/ac
	Transmit Power	2.4G 100mW; 5G 200mW;

WiFi 5	Antenna Gain	5dBi
	Antenna	Dual-antenna MIMO (2.4G&5G)
	WLAN Penetrate	One reinforced concrete wall or two ordinary brick walls (non-reinforced concrete)
	WLAN Access Capability	64/SSID
	Channel	2.4GHz (channel 1-13) 5GHz (channel 36-161)
	WPS	WLAN terminal devices with WPS Push Button function establish connection within 2 minutes
	WLAN Security Function	WPA2-PSK/WPA3-SAE (2.4G only) WPA3-SAE (2.4G only) WPA-PSK/WPA2-PSK WPA2-PSK WPA-PSK Open System & Shared Key Shared Key Open System
	Air Speed	300Mbps (2.4GHz) 867Mbps (5GHz)
	Multicast	WMM (Wi-Fi Multi Media)
VOIP	VoIP Port	Call waiting, In-conditional Call Forward, Call Forward if Busy, Call Forward if no reply and three-party calls. G711A/G711U/G729/G722 SDP protocol (RFC 2327 and RFC 4566) T.30/T.38/G.711 fax mode DTMF

Panel view



Interface		Description
1	POWER	12V/1A, power input interface
2	ON/OFF	Power switch button
3	RST	Reset the ONT
4	LAN1/LAN2/LAN3/LAN4	RJ45 10/100/1000M Base-T Ethernet interface
5	VOIP	RJ-11 FXS interface
6	PON	G/EPON interface
7	WPS	WPS switch button
8	WIFI	WIFI switch button
9	USB	USB interface

LEDs Operating Status

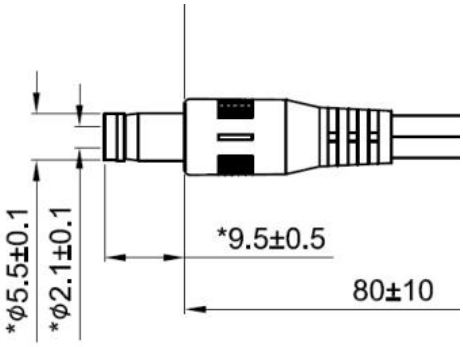
The operation status of FC2104C can be determined by using the front LED. The panel LED indicator will display the status of each interface. The meaning of LED is shown in the following table.

LED	Color	Indicates
PWR	Green/Solid	Normal
	OFF	No power
LOS	Red	Optical link is NOT OK (rang: out of -8~-29dBm)
	Green/Flash	Optical link is OK (rang: in -8~-29dBm)
	Green/Solid	Registered successful and active
Internet	Green/Solid	The WAN interface of the internet is configured
	OFF	The Internet WAN interface is not configured or the Internet WAN interface is configured but does not take effect.
LAN1/ LAN2/ LAN3/ LAN4	Green/Flash	Device connected
		Active or Link data receive and transfer (Green/Flash)
	OFF	Device not connected
		Link down
VOIP	Green	Successfully registered to softswitch
	OFF	Not be registered to softswitch
USB	Green	Connected and data receive and transfer
	OFF	No power/error/USB is not connected/USB disable
WIFI_2.4G/5G	Green/Flash	The terminal is connected to transmit data wirelessly
	OFF	No power/WIFI disable
WPS	Green	WPS started working
	OFF	WPS is not working

Plug-In Units

The device uses a standard 5.5*2.1*9.5mm Non tuning fork DC head interface power adapter. Select an appropriate adapter for power supply according to device energy consumption.
The below shows the electrical characteristics of the adapter:





Characteristic	Power adapter
AC: INPUT	AC: 100 ~ 240V; 50/60Hz
DC: OUTPUT	DC: 12V/1A
Rated Power	12W

Software Specification

Attributes	Description
XPON Feature	ITU-T G.984.1-4 ITU-T G.988/TR255/TR156 IEEE802.3ah 15 TCONTs/256GEM ports 8 Egress queues per TCONT at least VLAN/priority/VEIP gem mapping mode SN/LOID/SN+Password authentication Performance monitoring: eth/Gem port Dying gasp
Ethernet Port	Ethernet port-based VLAN tags and tag removal MAC address learning 10/100/1000Mbps Auto negotiation
L2 Feature	MAC learning (SVL)/aging Support max frame length to 1518 bytes VLAN tagging for untagged packets Support VLAN 1-4094
L3 Feature	PPPoE/Static IP/DHCP NAT/NAPT Port forwarding ALG, UPnP, DDNS IPv4/IPv6 dual stack, DS-Lite Static, and Default Routes Multiple services on one WAN port
QoS	Support 8 Queues with Strict Priority Ethernet port rate limitation 802.1 priority

	SP/WRR Service flow classification
Multicast	IGMPv2 (RFC 2236) and IGMPv3 (RFC 3376) IGMP snooping and IGMP Proxy MLDv1
Management	OMCI/WEB UI/TR069 Telnet/SSH Management with CLI commands Dual-system software backup and rollback

Purchase Info

Model Number	Description
FC2104C	4GE+1VOIP+1USB+WIFI5+G/EPON， Accessories: Power Adapter, RJ45 cable, RJ11 cable；