



FC3104X
4GE + POTS + WIFI6 AX3000

Product Overview

The FC3104X is a XPON optical terminal access device (AX3000Mbps) that is highly integrated with dual-frequency Wi-Fi6. It is the end-product of optical fiber for operator, which supports ultra-bandwidth access through XPON upstream technology, and provides users with basic WIFI functions, routing, VOIP, and gigabit Ethernet functions. The FC3104X upstream network ports are XPON ports. The downstream user ports include four GE electrical ports, one USB port, one VOIP port, and AX3000 WiFi6 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 3.0 interface
- Dual-band WIFI6 AX3000 (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

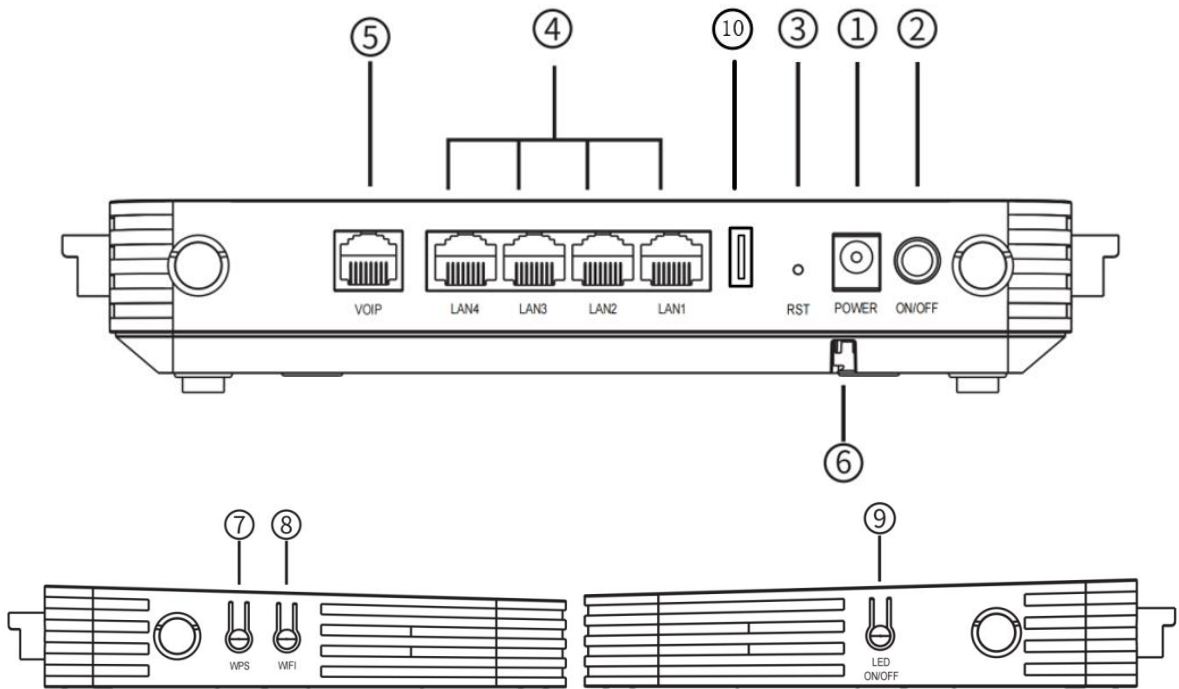
Hardware Specifications		Description
Port		4GE+1VOIP+1USB+WIFI6+G/EPON
LED		POWER+PON/LOS+INTERNET+LAN+VOIP+WiFi+WPS+USB
Button		POWER+RST+WIFI+WPS+LED
Flash&Memory		Flash: 64MB; Memory: 256MB;
Power Supply		12V/1.5A
Power Consumption		<15W
Environment Standard		Operating Temperature: -5~45°C Storage Temperature: -20~70°C Operating Humidity: 5%~95% (non-condensing)
Environment Friendly		RoHs、CE、CCC
Weight		0.35KG
Size (W*D*H) mm		190mm*135mm*33mm
PON Module Type		Class B+, SC/UPC (or SC/APC)
Wavelength		UP 1310nm, Down 1490nm
TX Optical power		0.5~5dBm
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		USB3.0
WIFI		Dual-band WIFI6 AX3000 (2×2 MIMO (2.4G&5G))

WiFi6 (AX3000)

Attributes		Description
WiFi6 (AX3000)	WiFi Protocol	2.4GHz supports 802.11b/g/n/ax 5GHz supports 802.11a/n/ac/ax
	Transmit Power	2.4G 100mW; 5G 200mW;

	Antenna Gain	5dBi
	Antenna	Dual-antenna MIMO (2*2) (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	WPA-PSK、WPA2-PSK、WPA3、WPA-PSK/WPA2-PSK AES、AES+TKIP
	Air Speed	574Mbps (2.4GHz) 2402Mbps (5GHz)
	Multicast	WMM (Wi-Fi Multi Media)

Panel view



Interface		Description
1	POWER	12V/1.5A, 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	LED ON/OFF	LED switch button
10	USB	USB interface

LEDs Operating Status

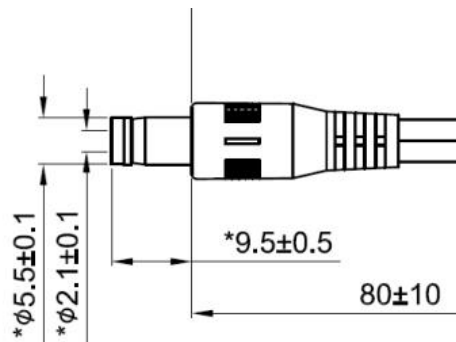
The operation status of FC3104X can be determined by using the front LED. The panel LED indicator will display the status of each interface. The meaning of LED is shown in the following table.

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	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/1.5A
Rated Power	18W

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
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
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
FC3104X	4GE+1VOIP+1USB+WIFI6+G/EPON, Accessories: Power Adapter, RJ45 cable, RJ11 cable;