FTTH Wi-Fi 6 GPON ONU

RT005



Overview

This FTTH GPON ONU with Wi-Fi 6 is a broadband access device specifically designed for residential and SOHO (small office/home office) networks. The ONU supports GPON, combined with Wi-Fi 6 for high-speed internet access. It is compatible with mainstream OLTs in the industry, including Nokia, ZTE, Fiberhome, and Calix. The device is equipped with 4 LAN ports, 1 VoIP port, 1 USB port, and 1 CATV port, ensuring high-quality transmission of audio, video, and data. With enhanced QoS, WEB and OMCI management, and comprehensive security protocols, the device ensures a high-quality and reliable internet experience for users.

Features

Compliant with GPON ITU-T G984.X

Compatible with mainstream OLTs

Supports Wi-Fi 6

Supports bidirectional FEC function

Supports multiple services, such as CATV and VoIP

Supports OMCI remote management

Technical Specification

Hardware Feature		
Core	CPU	>1000DMIPS
	FLASH	256 MB
	DDR	512 MB
GPON Standards	ITU-T G.984.2, ITU-T G.984.3 and ITU-T G.984.4	
Distance	20KM Max	
Data Rates	Upstream	1.25 Gbps
	Downstream	2.5 Gbps
Interface	PON	TX Power 1 ~ 5dBm (1310nm) RX Power <-28dBm (1490nm)
	LAN	1000BASE-T x 4
	WLAN	802.11b/g/n/ac/ax 2T2R MIMO 2.4GHz and 5.8GHz
	WPS	Wi-Fi on/off button x 1 WPS x 1
	Power	DC-12V 1.5A
	CATV	F-female connector x 1
	USB	USB x 1
	VoIP	VoIP x 1
Dimensions (W X D X H)	19.5cm*13.5cm*3.5cm	

Wi-Fi Sensitivity	
2.4 GHz	Up to 573 Mbps
5.8 GHz	Up to 1200 Mbps
11g 54M: -76 dBm 11n HT20 MCS7: -74 dBm 11n HT40 MCS7: -71 dBm	11a 54M: -76 dBm 11ac VHT20 MCS8: -70 dBm 11ac VHT40 MCS9: -65.5 dBm 11ac VHT80 MCS9: -61.5 dBm

CATV Module	
Pass Channel Wavelength Range	λ1: 1550 ~ 1560 nm
Reflect Channel Wavelength Range	λ2: 1290 ~ 1330 nm λ3: 1480 ~ 1500 nm λ4: 1575 ~ 1580 nm λ5: 1610 ~ 1675 nm
Working Optical Power	-8dBm ~ +2dBm (Analog TV RF) -15dBm ~ +2dBm (DVB-C QAM RF)

RF Bandwidth	45 ~ 1000 MHz
RF Output Level	>14dBmV (@Optical input -2~-12dBm)
CNR	>46dBc@-6dBm (Analog TV RF)
CSO	<-63dBc@77ch NTSC (Analog TV RF)
CTB	<-63dBc@77ch NTSC (Analog TV RF)
MER (@256QAM)	>35dB@-12dBm (BER: <1.0E-9), >32dB@-15dBm (BER: <1.0E-9)
Optical AGC Control Range	0 ~ 12 dB

Software Feature

Software Function

FEC	Support bidirectional FEC function
VLAN	802.1Q tag VLAN, VLAN transparent mode/VLAN translation mode/VLAN trunk mode
Dying Gasp	Support power-on/off alarm function Power failure and ODN interruption recovery configuration is not lost, and services can be self-recovery
Optical line	Supports parameters monitoring of optical links
FTP Extend	Support FTP-based configuration and system automatic upgrade function
LAN	Support 802.3x flow control protocol Support loop detection function (self-loop shutdown)
WAN	Dynamic IP, Static IP, PPPoE
mirror	Support mirror function for each port
DHCP	Server, Client, DHCP Client List, Address Reservation
QOS	Rate limiting, the uniformity is ≦ ±10 %. DBA, support configuration of PIR & CIR Priority queue, support ≥4 traffic classes for Ethernet frames
VoIP	Built-in voice gateway to realize IP telephone service Support SIP and H.248
WLAN	Support WEP, WPA, WPA2, 802.11i Support speed limitation on WLAN

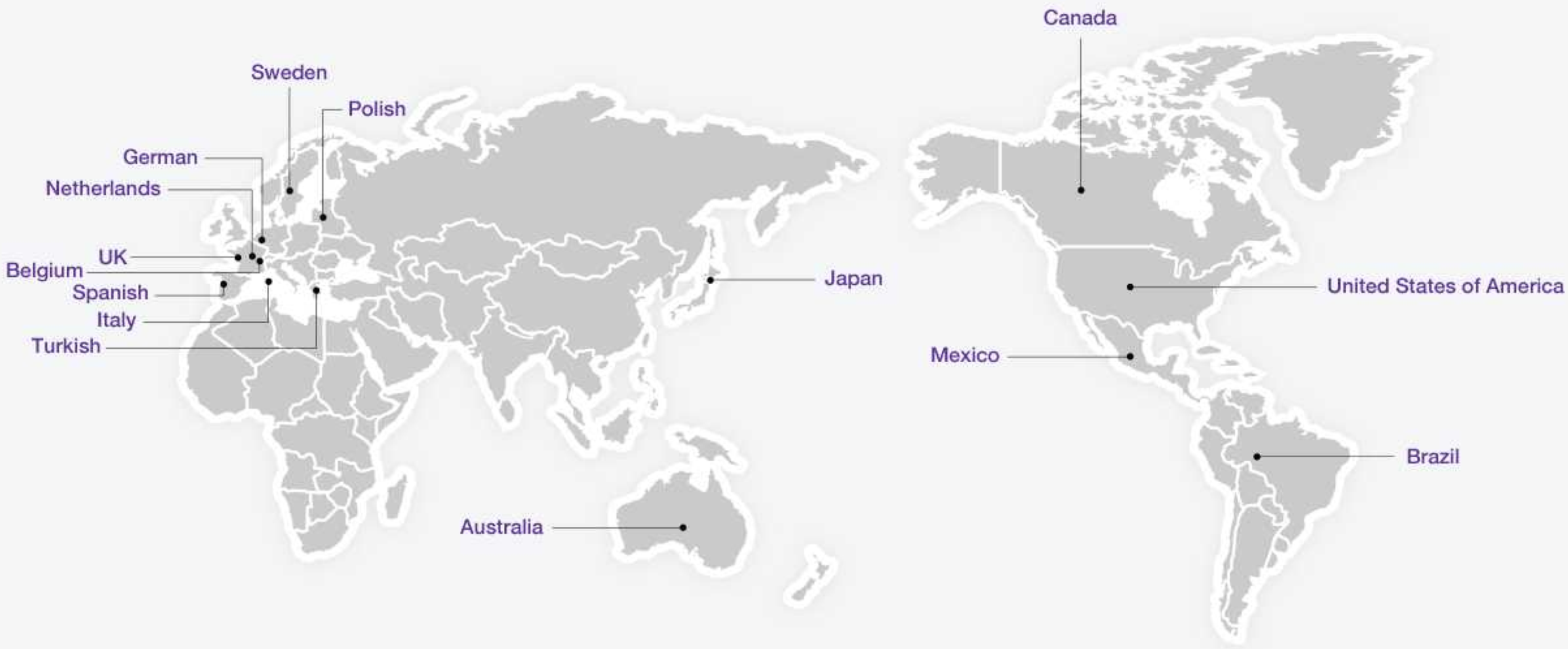
ALG	Support SIP, FTP, RTSP, L2TP, H.323 private network traversal function
IGMP	Support IGMPv1/v2/v3 Support IGMP message rate limiting.
CATV Module	Support to enable/disable CATV module by remote Support to load and display CATV information
Port Forwarding	Virtual Server, Port Triggering, UPnP, DMZ
IPv6	support to get IPv4 and IPv6 information in CHT network with PPPoE WAN, including address, subnet mask, PD and DNS
Access control	Support only the legal remote IP can access the ONT. Support to define different access level account. Support auto-logout. Support accounts management through LAN and WAN.
Firewall Security	DoS, SPI Firewall IP Address Filter/MAC Address Filter/Domain Filter IP and MAC Address Binding

Management

CLI	Support Telnet and SSH support to access via wan interface
WEB	Support easy used WEB UI
TR069	Support centralized management by TR069 Include WLAN and CATV module

Environmental

Operating Temperature	0°C~40°C (32°F~104°F)
Storage Temperature	-40°C~70°C (-40°F~158°F)
Relative Humidity	10%~90%, non-condensing
Storage Humidity	5%~95%, non-condensing
Certifications	CE, RoHS, NCC, BSMI



https://www.vcelink.com

Company Profile

HANGZHOU HONGJIE ELECTRONICS CO., LTD, established in 2006, is headquartered in Hangzhou, China. Under its brand "VCELINK," the company specializes in the production and sale of high-quality network accessories, network cables, optical cables, patch cords, audio-video accessories, as well as various types of tools. These products are primarily used in the fields of structured cabling, computers, and the electronics industry. VCELINK offers personalized customization services to its customers, and in addition to online direct purchases, users can also choose bulk procurement or customized services, all aimed at meeting the unique needs of various customers.

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