
ONT-2GE-V-RFDW
Technical Specifications

1. Overview

ONT-2GE-V-RFDW is launched to be oriented to multi-service integration network as an optical network unit device, which belongs to XPON HGU terminal for FTTH/O scenario. It configures two 10/100/1000Mbps ports, WiFi (2.4G+5G) port, one POTS port and RF interface that providing with high-speed data services and high-quality video services to users.



Hardware parameters

Dimension	220mm x 150mm x 32mm(Without antenna)
Weight	Approximately 310g
Working environment temperature	-20℃ ~ +55℃
Working environment humidity	5% RH~95% RH, non-condensing
Power adapter input level	90V~270V AC, 50/60Hz
Device power supply	11V~14V DC, 1.5 A
Static power consumption	7.5 W
Maximum power consumption	18 W
Interfaces	1POTS+2GE+Wi-Fi(2.4G+5G)+RF
indicator light	POWER/PON/LOS/LAN/TEL/WLAN/RF

Interface parameters

PON interface	<ul style="list-style-type: none">• ClassB+• -27dBm receiver sensitivity• Wavelength: upstream 1310nm, downstream 1490nm• Support WBF• Flexible mapping between GEMPort and TCONT• Authenticationmethod:SN/password/LOID(GPON)• Two-way FEC(Forwarderrorcorrection)• Support DBA for SRand NSR
Ethernet port	<ul style="list-style-type: none">• Stripping based on VLAN Tag/Tag for Ethernet port.• 1:1VLAN/N:1VLAN/VLAN Pass-through• QinQVLAN• MACaddress limit• MACaddress learning
POTS interface	<ul style="list-style-type: none">• Maximum number for two ports that joint-up connecting in parallel with Telephone: 4REN• Support G.711A/u, G.729a/b, G.722 CODEC• Support T.30/T.38 mode for fax• DTMF• Emergency calls protocol
WLAN	<ul style="list-style-type: none">• IEEE 802.11b/g/n,11AC• 2×2MIMO• Antenna gain: 5dBi• WMM(Wi-Fi multimedia)• Multiple SSID multiple• WPS• Easy Mesh
RF interface	<ul style="list-style-type: none">• Supports standard RF interfaces• Support hd data streaming

5G parameters

Network standard	IEEE 802.11ac
Antennas	2T2R, support MU-MIMO
Maximum supported rates	20M:173.3Mbps 40M:400Mps 80M:866.7Mbps
Data modulation type	BPSK QPSK 16QAM 64QAM 256QAM
Maximum output power	≤20dBm
Typical channel (customizable)	36、40、44、48、52、56、60、64、100、104、 108、112、116、120、124、128、132、136、 140、144、149、153、157、161、165
Encryption mode	WPA、WPA2、WPA/WPA2、WEP、NONE
Encryption type	AES、TKIP

2. Function Data

Intelligent interconnection

- WiFi intelligence coverage
- SIP/H.248 auto-adapting
- Any port anyservice
- Parental control
- L2/L3(IPv4) re-transmission: 1G forward, 2G backward

Properties for three layers

- PPPoE/static IP/DHCP address access
- NAT/NAPT
- ALG,UPnP
- DDNS/DNS server/DNS client
- IPv6/IPv4 dual-stack,DS-Lite
- Static route/default route

Multicast

- IGMP v2/v3snooping
- IGMP v2proxy
- IGMP v3proxy
- MLD v1/v2snooping

Qos

- Ethernet port speed limit
- 802.1p priority
- SP/WRR/SP+WRR
- Broadcast message speed limit

Security

- SPI Firewall
- MAC/IP/URL address filtering

O&M

- OMCI/WebUI/TR069

Powersaving

- Indicator light energy-efficient
- Timing switch

CATV parameters

	project	unit	performance parameters	note
Optical parameters	Wavelength of light	nm	1200~1600	
	Optical connector form		SC/APC	Other customizable
	Receiving light power range	dBm	-18~0	Other customizable
	Optical AGC control accuracy	dBm	-15~0	Other customizable
Radio frequency (rf) parameters	Frequency range	MHz	47~1000	
	Output rf impedance	Ω	75	
	Output flatness	dB	± 1.5	
	Number of RF ports		1	
	Nominal output level	dBuv	$\geq (75 \pm 1.5)$	Other customizable
	Output reflection loss	dB	>14	
	MER	dB	>31@-15dBm	see*note1

			>34@-9dBm	
Link indicators	C/N	dB	>51	GYT143-2000
	CTB	dBc	>65	
	CSO	dBc	>61	
	Working temperature	°C	-10~+60	
	Storage temperature	°C	-40~+80	
	Working humidity		20%~90%	
	Store humidity		10%~95%	
	Dustproof requirements		《YD/T1475-2006》	
	MTBF	H	40000H	

*note1: The test conditions are 59 analog channels and 38 digital channels.