



1GE CATV WIFI EPON ONU



Item	Parameter
PON Interface	1 EPON optical interface Meet 1000BASE-PX20+ standard Symmetric 1.25Gbps upstream/downstream SC/APC single-mode fiber split ratio: 1:64 Transmission distance 20KM 1*10/100/1000M auto-negotiation
User Ethernet Interface	Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance
Power Interface	1 RF output Female F-Type Connector 12V DC Power supply
PON	Wavelength: Tx 1310nm, Rx1490nm
Optical	Tx Optical Power: 0~4dBm Rx Sensitivity: -27dBm Saturation Optical Power: -3dBm
Parameter	Connector Type: SC Optical Fiber: 9/125 μ m single-mode fiber
Data Transmission Parameter	PON Throughput: Downstream 950Mbps; Upstream 930Mbps Ethernet: 1000Mbps



	Packet Loss Ratio: $<1 \times 10^{-12}$ latency: $<1.5\text{ms}$
	Layer 2 wire speed switching
	Support VLAN TAG/UNTAG, VLAN conversion
Business Capability	Support Port-based speed limitation
	Support Priority classification
	Support storm control of broadcast
	Support loop detection
	Support IEEE802.3 QAM, ONU can be remotely managed by OLT
Network Management	Support Remote management through SNMP and Telnet
	Local management
Management Function	Status monitor, Configuration management, Alarm management, Log management
Shell	Plastic casing
Power	Power supply: DC 12V /1A
	Power consumption: $<6.5\text{W}$
Physical Specifications	Item Dimension : 160mm(L)*140mm(W)*29mm(H)
	Item weight : 0.2kg
Environmental Specifications	Operating temperature: 0 to 50°C
	Storage temperature: -40 to 85°C
	Operating humidity: 10% to 90%(Non-condensing)
	Storage humidity: 10% to 90%(Non-condensing)

CATV

Item	Parameter
Wavelength	1100-1600nm
Optical return loss	$>45\text{dB}$
Input optical power	-18dBm~0dBm
RF frequency	47MHz~1000MHz
RF output lever	78dBuV (@-12~-2dBm@85MHz)
CNR	$>41\text{dB}$ (@-10dBm@DS22 Channel)
CSO	$>60\text{dBc}$ (@-10dBm@DS22 Channel)



CTB >60dBc (@-10dBm@DS22 Channel)
RF output return loss >12dB
RF impedance 75Ohm
AGC function Support

WIFI Specification

Item	Parameter
Operating Mode	Router or bridge IEEE 802.11b: 11Mbps
Throughput	IEEE 802.11g: 54 Mbps IEEE 802.11n: 300Mbps
Frequency	2.412 ~ 2.472 GHz
Channel	13*Channel, configurable to meet the standard of USA, Canada, Japan and China
Modulation	DSSS , CCK and OFDM
Coding	BPSK, QPSK, 16QAM and 64QAM 802.11b: -83dBm @ 1 Mbps; -80dBm @ 2 Mbps; -79dBm @ 5.5 Mbps; -76dBm @ 11 Mbps 802.11g: -85dBm @ 6 Mbps; -84dBm @ 9 Mbps; -82dBm @ 12 Mbps; -80dBm @ 18 Mbps; -77dBm @ 24 Mbps; -73dBm @ 36 Mbps; -69dBm @ 48 Mbps; -68dBm @ 54 Mbps 802.11n 20MHz: -74dBm @ 65 Mbps; -70dBm @ 130 Mbps; 802.11n 40MHz: -70dBm @ 135 Mbps; -67dBm @ 300 Mbps
Performance parameters	
RF receive sensitivity	



802.11b:

$17 \pm 0.5\text{dBm}$ @ 11Mbps

802.11g:

$15 \pm 0.5\text{dBm}$ @ 54 Mbps; $16 \pm 0.5\text{dBm}$ @ 48 Mbps;

$17 \pm 1\text{dBm}$ @ 6 ~ 36 Mbps

RF output level

802.11n 20MHz:

$14 \pm 0.5\text{dBm}$ @ 130 Mbps; $15 \pm 0.5\text{dBm}$ @ 78 Mbps;

$18 \pm 0.5\text{dBm}$ @ 6.5 Mbps

802.11n 40MHz:

$14 \pm 0.5\text{dBm}$ @ 300 Mbps; $15 \pm 0.5\text{dBm}$ @ 162 Mbps;

$18 \pm 0.5\text{dBm}$ @ 13.5 Mbps

Encryption Mode

802.11i security: WEP-64/128, TKIP (WPA-PSK) and AES (WPA2-PSK)