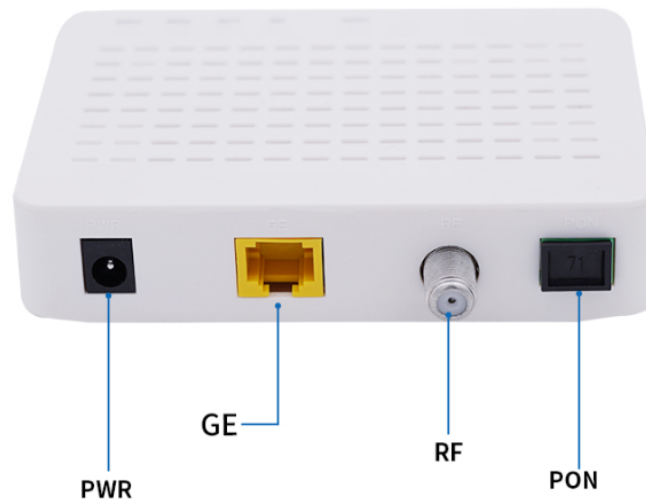

G53C XPON ONT

1GE+CATV SingleFiber



Overview



G53C is a residential gateway device with SFU functions for xPON ONU and SOHO users, which is in line with ITU-T G.984 and IEEE802.3ah.

The uplink of G53C provides one PON interface, while downlink provides one Ethernet and RF interface. It can realize optical access solutions such as FTTH (Fiber To The Home) and FTTB (Fiber To The Building). It fully integrates the reliability, maintainability and security design of carrier-grade equipment, and provides customers with the last kilometer of broadband access to residential and corporate customers.

Features

Data

The G53C xPON ONT is delivered with 1GE and 1RF interface, supporting:

- EPON&GPON mode adaptive
- GPON WAN port with 1.244Gbps uplink / 2.488Gbps downlink link;
- 1x 10/100/1000BASE-T Ethernet RJ45 Ports;
- 1x CATV;

Specification

	Item	unit	indicators
Optical SPEC	Working wavelength	nm	PON: TX1310, RX1490; CATV: 1150 ~ 1600
	The light emitting power	dBm	1 ~ +4(xPON)
	Transmission distance	km	0~20
	Transmission rate	Gbps	GPON: Up 1.244Gbps; Down 2.488Gbps EPON: Up 1.244Gbps; Down 1.244Gbps
	The light receiving sensitivity	dBm	≥ -27
	Optical fiber connector	/	SC/APC (Optional SC/APC)
	CATV optical power range	dBm	+2 ~ -18
	CATV optical reflection loss	dB	≥45
	CATV responsivity	A/W	≥0.9 @1550nm
RF SPEC	Broadband/roughness	MHz/dB	45 ~ 1000/≤ ±1.5 (@-15 ~ -10dBm)
	Output level	dBuv	≥80 (@-12 ~ -2dBm, 3.5%)
	Reflection loss	dB	≥14 (75Ω)
	CNR/MER	dB	≥45/32 (-9dBm, PAL-D 60CH, OMI3.8%)
	CTB/CSO/HUM	dB	≥60/≥60/≥46
Other Port	The user side Ethernet ports	/	1GE
	RF output interface	/	F head metric or inch
KEY/Button	/	/	Reset Key
Other	power supply	V/A	DC12V 0.5A

	Working Environment	°C	-10°C ~ 45°C
	Environment humidity		5% ~ 95%

IC

- RTL9601

Power Supply

- +12V/0.5A (feed via external AC/DC adapter)
- 2-PIN power adaptor input

PON Interface

- Compliance with IEEE 802.3ah(EPON) & ITU-T G.984.x(GPON) standard
- BoSA on board optical solution
- 1.244 Gbps Burst Mode Upstream Transmitter
- 2.488 Gbps Downstream Receiver
- Compliant with ITU-T G.984.2 Amd1, Class B+
- Wavelengths: US 1310nm, DS 1490nm
- Multiple T-CONTs per device
- Multiple GEM Ports per device
- Flexible mapping between GEM Ports and T-CONT
- Activation with automatic discovered SN and password in conformance with ITU-T G.984.3
- AES-128 Decryption with key generation and switching
- FEC (Forward Error Correction) in both directions
- DBA reporting by piggyback reports in the DBRu (mode 0 and mode 1)
- Mapping of GEM Ports into a T-CONT with priority queues based scheduling
- Support Multicast GEM port and incidental broadcast GEM port.

Ethernet Interface

- 10/100/1000BASE-T
- Ethernet port auto negotiation or manual configuratio

LED

- PWR
- PON
- LOS
- GE
- CATV

OAM

- Standard compliant OMCI (the embedded operations channel) interface as defined by ITU-T G.988(GPON)
- Remotely software image download over OMCI, as well as activation and rebooting