

PU-G811



Brief Views

Picotel PU-G811 is fiber to the home multi service access GPON ONT. It's based on the mature, stable, high cost performance GPON technology and has gigabit Ethernet switching, WDM and HFC technology. Picotel PU-G811 has a higher bandwidth, higher reliability, easy management and good quality of service (QoS) guarantee with technical performance of equipment meet the ITU G. 984 requirements and have good compatibility with third party manufacturers OLT.

GPON is the latest generations of access network technology. ITU-T G.984 is the standard protocol of GPON. The GPON standard differs from other PON standards in that it achieves higher bandwidth and higher efficiency using larger, variable-length packets. GPON offers efficient packaging of user traffic, with frame segmentation allowing higher quality of service (QoS) for delay-sensitive voice and video communications traffic. GPON network provides the reliability and performance expected for business services and provides an attractive way to deliver residential services. GPON enables fiber to the home (FTTH) deployments economically resulting to accelerated growth worldwide.

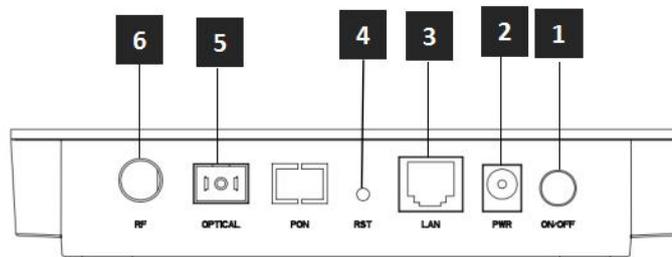
It adopts single fiber WDM technology with downlink wavelength 1550nm and 1490nm, uplink wavelength 1310nm . It only needs one-core fiber to transmit data and CATV service.

Functional Feature

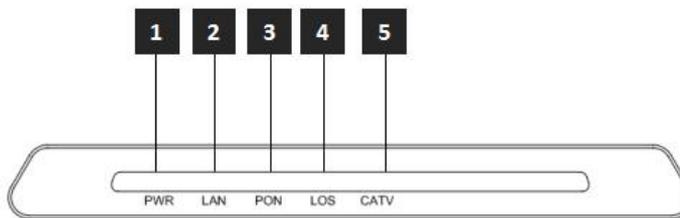
- Support port-based rate limitation and bandwidth control;
- In compliant with ITU - T G. 984 Standard
- Support data encryption, group broadcasting, port Vlan separation ,etc.
- Support Dynamic Bandwidth Allocation (DBA)
- Support ONU auto-discovery/Link detection/remote upgrade of software;
- Support port mode of VLAN configuration

- Support power-off alarm function ,easy for link problem detection
- Support broadcasting storm resistance function
- Support port flow control
- Support ACL and SNMP to configure data packet filter flexibly
- Specialized design for system breakdown prevention to maintain stable system
- Support software online upgrading
- EMS network management based on SNMP ,convenient for maintenance

Product interface and LED definitions



- 1 Power On/Off Button
- 2 DC Power Port
- 3 LAN Port
- 4 Reset
- 5 PON Optical Port
- 6 RF port



- 1 Power status
- 2 LAN port status
- 3 ONU Register
- 4 Optical signals status
- 5 CATV status

Indicator			Description
1	PWR	Power status	On: The ONU is power on Off: The ONU is Power off
2	CATV	CATV status	On: CATV optical normal Off: The CATV signals are not received
3	LAN	LAN port status	On: Ethernet connection is normal Blinking: Data is being transmitted through the Ethernet port Off: Ethernet connection is not set up
4	LOS	EPON optical signals	On: Optical power lower than receiver sensitivity ; Off: Optical in normal
5	PON	ONU Register	On: Success to register to OLT Blinking: In process of registering to OLT Off: Failed to register to OLT;

Specification

Item	Parameter
PON Interface	1*GPON port, FSAN G.984.2 standard, Class B+ Downstream Data Rate: 2.488Gbps Upstream Data Rate: 1.244Gbps SC/PC single mode fiber 28dB Link loss and 20KM distance with 1:128
User Ethernet Interface	1*10/100/1000M auto-negotiation Full/half duplex mode RJ45 connector Auto MDI/MDI-X 100m distance 1 RF output Female F-Type Connector
Power Interface	12V DC Power supply
PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0.5~5dBm Rx Sensitivity: -27dBm Saturation Optical Power: -8dBm
Data Transmission Parameter	PON Throughput: Downstream 2.488Gbit/s s; Upstream 1.244Gbit/s Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Business Capability	Layer 2 wire speed switching Support VLAN TAG/UNTAG, VLAN translation Support Port-based speed limitation Support Priority classification Support storm control of broadcast Support loop detection
Network Management	Standard compliant OMCI interface as defined by ITU-T G.984.4 Support WEB management
Management Function	Status monitor, Configuration management, Alarm management, Log management
Shell	Plastic casing
Power	<5W, 12V/0.5A power supply adapter
Physical Specifications	Item Dimension: 160mm(L)*120mm(W)*32mm(H) Item weight: 0.3kg
Environmental Specifications	Operating temperature: 0 to 50°C Storage temperature: -40 to 85°C Operating humidity: 10% to 90%(Non-condensing)

CATV

Item	Parameter
Wavelength	1550nm
Optical return loss	>45dB
Input optical power	-18dBm~0dBm
RF frequency	47MHz~1000MHz
RF output lever	$\geq 78\text{dBuV}$ (@-12~-2dBm@85MHz)
AGC control accuracy	$< \pm 1\text{db}$
Flatness	$< \pm 1.5\text{db}$
CNR	$> 41\text{dB}$ (@-10dBm@DS22 Channel)
CSO	$> 60\text{dBc}$ (@-10dBm@DS22 Channel)
CTB	$> 60\text{dBc}$ (@-10dBm@DS22 Channel)
RF output return loss	$> 14\text{dB}$
RF impedance	75 Ω
AGC function	Support

Network application

Typical Solution: FTTH

Typical Business: INTERNET

