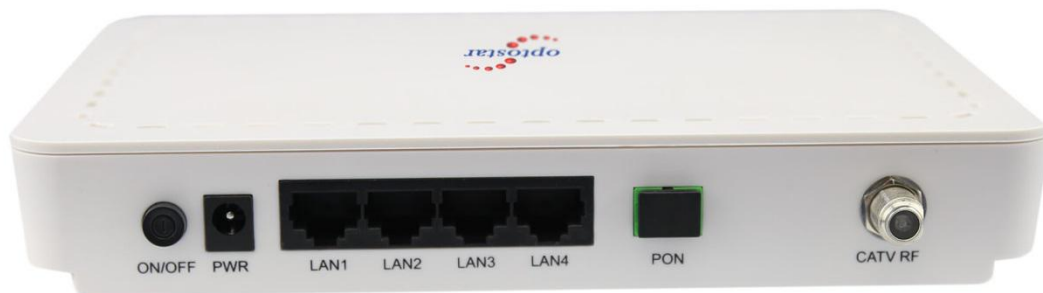




OP-C0401 HGU GPON ONU



OP-C0401 GPON HGU ONU is one of the GPON optical network unit design to meet the requirement of the broadband access network. It apply in FTTH/FTTO to provide the data, voice and video service based on the GPON network.

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

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 networks 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

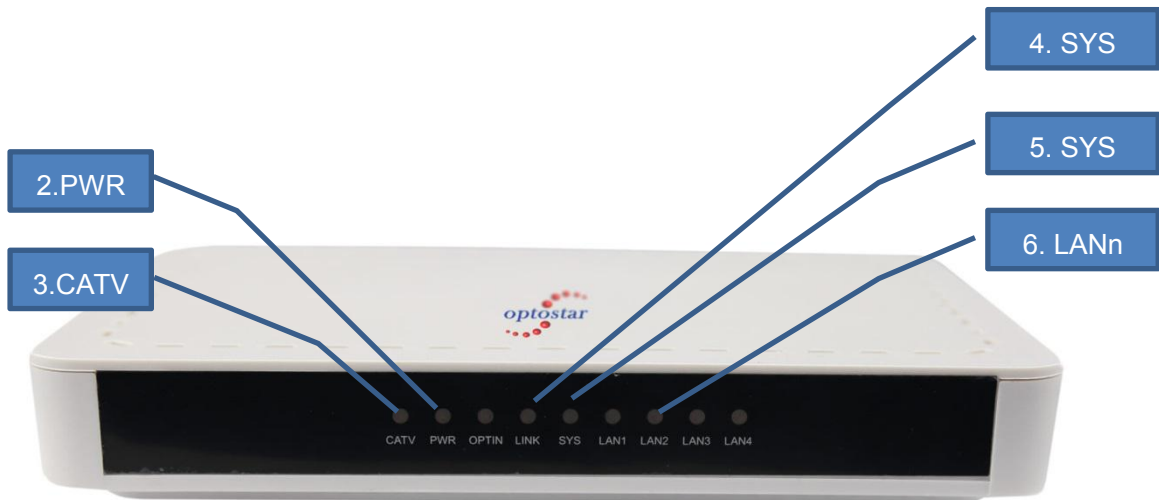
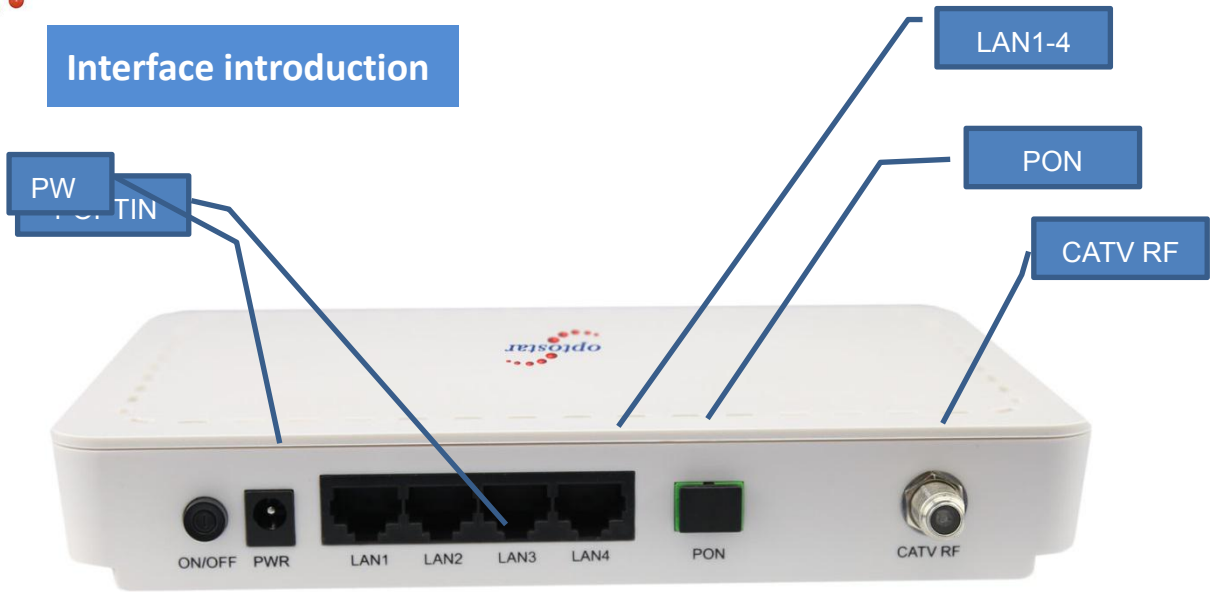
economically resulting to accelerated growth worldwide.

OP-C0401 provide four GE auto-adapting Ethernet ports one RF CATV output, The OP-C0401 features high-performance forwarding capabilities to ensure excellent experience with VoIP, Internet and HD video services. Therefore, the OP-C0401 provides a perfect terminal solution and future-oriented service supporting capabilities for FTTH deployment. It has good third-party compatibility to work with the third party OLT, such as Huawei/ZTE/Fiberhome /Alcatel-Lucen.

Features

- Full compatible with ITU-T G.984
- Support four GE auto-adapting Ethernet ports
- Support CATV RF Output
- Support OMCI and TR069 for remote management
- Support Web for local management
- Support Auto-negotiation andMDI/MDIX
- Support the Ethernet interface rate, working mode andflows control
- Support loopback at UNI
- Support packet filtering and anti-illegal message attack protection
- Support performance statistics of Ethernet lines
- Support VLAN tagged label processing, traffic classification and packet filtering, STP/RSTP etc.
- Support DHCP Option60 reporting the location information of the Ethernet interface
- Support PPPoE+ for accurate subscribers identification
- Support H.248、 MGCPandSIP protocol
- Support IGMP Snooping
- Support AES-128
- CATV support turn on/off RF output remotely

Interface introduction



Indicator		Description	
1	OPTIN	optical signals	On: Optical in normal; Blinking: Optical power lower than receiver sensitivity ; Off: Optical link abnormal;
2	PWR	Power status	On: The ONT is power on; Off: The ONT is Power off;
3	CATV	CATV status	On : CATV optical normal Off : The CATV signals are not received
4	LINK	ONU/ONT Register	On: Success to register to OLT; Blinking: In process of registering to OLT; Off: Failed to register to OLT;
5	SYS	System	On:The ONU/ONT system working properly; Blinking: The ONU/ONT software upgrade; Off:The ONU/ONT working abnormal;
6	LANn	LAN port status	On: Ethernet connection is normal; Blinking: Data is being transmitted through the Ethernet port; Off: Ethernet connection is not set up;

Parameter		
Item	Parameters	Specification
Interface	PON Port	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 30KM distance with 1:128
	Ethernet Port(LAN)	1*10/100/1000M Auto-negotiation RJ45 ports Full Duplex / Half-Duplex RJ45, Auto-MDI/MDI-X Transmission Distance 100 Meter
	CATV Interface	1 RF outputFemale F-Type Connector
	Power Supply Port	12V DC input
	PON Optical Parameter	Wavelength: Tx 1310nm, Rx1490nm Tx Optical Power: 0~5dBm Rx Sensitivity: -27dBm Saturation Optical Power: -8dBm Connector Type: SC Optical Fiber: 9/125μm single-mode fiber
	Data Transmission Parameter	PON Throughput: Downstream 2.488Gbit/s ; Upstream 1.244Gbit/s Ethernet: 1000Mbps Packet Loss Ratio: <1*10E-12 latency: <1.5ms
Management	Network Management	Standard compliant OMCI interface as defined by ITU-T G.984.4 Support TR069 and WEB management
	Management Function	Status monitor, Configuration management, Alarm management, Log management
Environmental Specifications	Shell	Plastic casing
	Power	External 12V 1A AC/DC power supply adapter Power consumption: <7W
	Dimensions	170mm(L)*130mm(W)*30mm(H) 0.3kg
	Environment	Operating Temperature: 0~45℃ Storage Temperature: -40~85℃ Operating Humidity: 10%~90%(Non-condensing)

Storage Humidity: 10%~90%(Non-condensing)

CATV

Item	Model		
	OP-C0401	OP-C0401L	OP-C0401A
Wavelength	1100-1600nm		
Optical return loss	>45dB		
Input optical power	-15dBm~0dBm	-18dBm~-9dBm	-18dBm~0dBm
RF frequency	47MHz~1000MHz		
RF output lever	84dBuV (@-5dBm@85MHz)	81dBuV (@-10dBm@85MHz)	78dBuV (@-12~-2dBm@85MHz)
CNR	>47dB (@-5dBm@ DS22 Channel)	>41dB (@-10dBm@DS22 Channel)	
CSO	>60dBc (@-5dBm@ DS22 Channel)	>60dBc (@-10dBm@DS22 Channel)	
CTB	>60dBc (@-5dBm@ DS22 Channel)	>60dBc (@-10dBm@DS22 Channel)	
RF output return loss	>14dB	>12dB	
RF impedance	75Ohm		
AGC function	/	/	Support

Application

- ✧ Solution: FTTH、FTTB、FTTO、PON+EOC
- ✧ Business: Broadband Internet、IPTV、VOD、IP Camera、WIFI

Network Construction

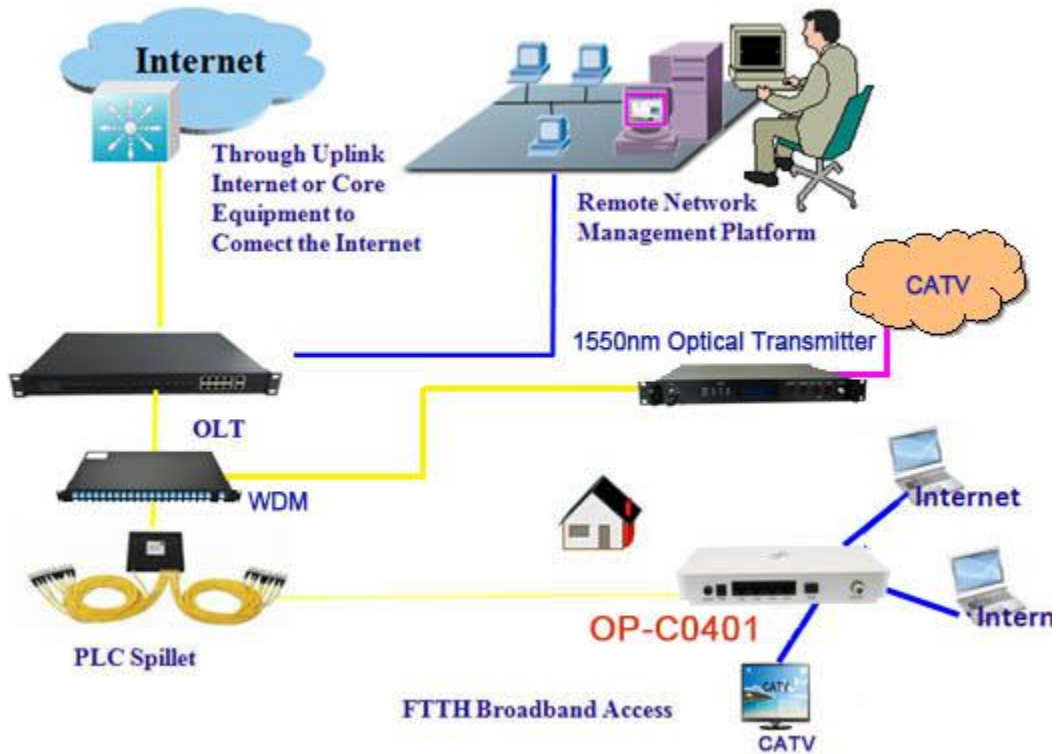


Figure: OP-C0401 Application Diagram

Ordering Information

Product Name	Product Model	Descriptions
HGU GPON ONT	OP-C0401	4*GE Ethernet interface,1*RF interface, 1 GPON interface, plastic casing, external power supply adapter

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