

# GPON OPTICAL NETWORK UNIT [ONU-G-1C-4L-x-x]

Fiber Products, Premise

**Taikan**  
ESTD. 1973

## Description

Gigabit Passive Optical Network (GPON) provides unprecedented bandwidth (up to 2.5 Gbps downstream rate, shared by up to 128 premises), and a greater distance allowing service providers to enable bandwidth-intensive applications and establish a long-term strategic position in the broadband market.

Taikan's GPON ONU is a high performance, economical terminal device that has four 10/100M Ethernet Ports, one CATV port and one PON port to transmit voice, data and video services for full triple play service support.



## Features

- Adheres to ITU-T G984 GPON standards
- Ethernet service Layer 2 switching and wire-speed forwarding of uplink and downlink services
- Integrated OAM remote configuration and maintenance functionality
- High rate PON: up/down – 2.5 Gbps Downstream 1.2 Gbps Upstream data, VOIP, and IPTV
- ONU subscriber authentication, auto-identification, plug and play, DBA dynamic bandwidth distribution
- QoS support including traffic flow classification, priority marking, queue and dispatch, traffic shaping and traffic control,
- Wifi supports advanced 2T2R MIMO technology to enhance the throughput and coverage range for high speed data rates of up to 300Mbps
- Dual GPON ports option for increased network reliability
- Power failure alarm



## Ordering Information

ONU - G - 1C - 4L - X - X

→ *wi* for Built in Wifi Option

→ *SF* (Single Fiber) or *DF* (Dual Fiber)

### Model Number

### Description

Model Number	Description
ONU-G-1C-4L-x-x	GPON Optical Network Unit, 1 CATV Port, 4 LAN Interface Ports

## General Specifications

Power Supply	12 VDC
Maximum Power Consumption	8 W
Working Temperature	0 °C ~ +55 °C
Storage Temperature	-30 °C ~ 60 °C
Relative Humidity	10% ~ 90% (Non-Condensing)
Surge Protection	Power and Service Ports have Surge Protection Circuitry

**GPON Specifications**

Interface Type	SC/APC SMF
Maximum Splitting Ratio	1:128
Speed	2.5 Gbps Downstream 1.2 Gbps Upstream
Sent Wavelength	1310 nm
Received Wavelength	1490 nm
Optical Output Power	-1 ~ + 3 dBm
Receiving Sensitivity	< -27 dBm
Optical Link Budget Loss	29 dB
Farthest Distance Between OLT and ONU	20 km

**Network Specifications**

Subscriber Identification	ONU IEEE802.1x
Service Quality	QoS IEEE802.1p, 1GMP Snooping, Ethernet port rate limit loop detection
Dynamic Bandwidth Allocate	DBA The largest bandwidth of every ONU subscriber and assures proper allocation quality
L2 Switch Function	MAC address management: IEEE802.1q VLAN and supports 4094 VLANs, Frame filtering and suppression, Network Address Translation & Network Address Port Translation (NAPT) IP sharing
Management Mode	Web Server, SNMP data collection
WAN Protocols	PPPoE/StaticIP/PPTP/DHCP
LAN Interface	Standard Appliance: IEEE802.310Base-T, IEEE802.3u 100Base-Tx/Fx IEEE802.3x Electrical Type and Quantity: 4 RJ45, 10M/100M Ethernet network ports

**CATV Specifications**

Interface Type	1 RF Output Female F Type Connector
Output Level	95 dBuV
RF Frequency	54-862 MHz
Automatic Gain Control Range	0 ~ 10 dB (CNR ≥ 46 dB @ 6 dB)
RF Impedance	75 Ohm

**Wifi Specifications**

Wireless Networking Standard	IEEE802.11n (Backwards compatible with IEEE802.11b/g)
Frequency Band	2.4 GHz
Data Transfer Rate	300 Mbs