



OT-4020VW GEPON ONU Data Sheet

OT-4020VW GEPON ONU With VoIP and 4 Port WIFI Router:

The **OT-4020VW** is a Telecom grade GEPON Optical Network Unit (ONU) based on IEEE802.3ah Gigabit EPON Standard. It is an Integrated 4 Port GePON ONU that offers Wired LAN, Wireless LAN and VoIP services to Subscribers. With a standard design, the **OT-4020VW** is compatible with any GePON OLT that is based on IEEE802.3ah standard.

Equipped with a GePON SC WAN port, the **OT-4020VW** offers a high speed fiber optical connection to Subscriber's house. The **OT-4020VW** also comes with a 4 Port IEEE802.11n Wireless Router and a 2 FXS Port Analog Telephone adaptor for home networking and VoIP applications. It is the best GePON CPE device for Internet Service Providers deploying Fiber To The Home applications.

Main Features:

- Offers 1 GePON SC port for uplinking to GePON OLT
- WDM technology (Upstream: 1310nm;Downstream: 1490nm),
- OLT and ONUs are connected with single fiber, the transmission distance can reach up to 20Km.
- Offers 4 Port 10/100Base-Tx for Home LAN connections
- Offers 2 FXS Ports for VoIP phone service application
- Support connecting with any Wired or wireless Analog Telephone sets or Digital Telephones
- Support T.38 Fax machine, users can send Fax through internet as well.
- Offers IEEE802.11n 150Mbps Wireless router for home wireless networking application,
- No extra broadband router required for subscribers
- Flexible Bandwidth Assignment:
- For downstream, the **OT-4020VW** share the bandwidth by encrypted broadcast method;
- For upstream, the **OT-4020VW** share the bandwidth by TDMA technology.
- It supports auto speed adjustment, its lowest adjustable rate is 1Kbps.

- Support Multicast, end users can optionally apply for VOD, Video conferencing, etc.
- Binding with PC user name, MAC and IP address, preventing PC, user accounts from being hacked.
- Support multiple LLID and Single LLID configurations. Different users, different application can use different LLID access. Ensure the different QOS priorities for end user.
- Easy installation, Support local/remote management and provision. Applying with GEPON OLT, the Gepon System can detect remote failures and indicate the location of the failure. Greatly saves your maintenance cost.

Hardware and Software Features:

- Fully Compatible with IEEE802.3ah Gigabit Epon Standard
- Offers 1 Gepon SC port for uplinking, 1.25Gbps
- Sensibility of Gepon Optical port: -2dBm to -27dBm
- Fiber Ratio: Different Fiber Ratio applies to different transmission distance, 1:64 MAX.
- When transmission distance is in 20Km, the fiber ratio is 1:16
- When transmission distance is in 10Km, the fiber ratio is 1:32
- When transmission distance is in 5Km, the fiber ratio is 1:64
- Support 1.8Gbps Backplane bandwidth
- Offers 4 10/100Base-Tx LAN port for downlinking to User PC, VoIP Phone, IPTV Setup box
- Built-in 2 FXS Port VoIP Phone Adaptor
- Support SIP protocol, two SIP accounts can be registered simultaneously
- Two calls can be made/received simultaneously
- Support auto-provisioning
- Support G.711,G.723.1,G.729A–8 kbps,G.726,G.722, ILBC voice codecs
- Support DTMF Tone Detection, DTMF Tone Relay, Multiple Calling Tone, FSK Caller ID.

- Support Calling line Identification Presentation and Calling line Identification Restriction
- Support call forwarding, call hold features
- Support QOS and TOS to ensure voice packets pass through in priority
- Support RFC62 Echo protocol
- Support SIP V1, V2 (RFC3261, RFC3262, RFC3264, RFC3265)
- Built-in IEEE802.11n Wireless Router,
- support wireless transmission rate of 150Mbps, 2.4GHz
- Comes with 4 10/100Base-Tx LAN ports
- Offers 1 USB host port
- Comes with 2 external Antenna of 5db
- Wireless Range support: Outdoor: 150m, Indoor: 100m
- Support DHCP, Static IP and PPPOE
- Support DHCP Server, DHCP Relay, DHCP Client
- Support Static Routing from source IP to destination IP
- Support firewall, NAT, NAPT, UPnP
- Support DDNS, DMZ Host, Port Forwarding
- Support 64/128 bit WEP, IEEE802.1x, WPA and WPA2 authentications
- Support Multiple SSID broadcasting, Hidden SSID and Wifi Protocol Setup (WPS),
- Support Automatically choose the best signal channel
- Support STA mutual isolation and ACL table based on MAC Accesses
- Support Wifi Multimedia (WMM), enhanced QOS for multimedia packets
- Support TR069 and WEB management, support Syslog
- Support SNTP Simple Network Time Protocol
- Comes with live LED Indicators for working status, standby status, power, Wifi connectivity, fiber Link, etc
- Desktop design, Plastic housing,
- External Power Supply,
- Impulse Power Supply, AC 96 – 260V, DC 12V, 2A

Specification of Ports:

- Uplink Port: 1.25Gbps Gigabit EPON SC Port

- Ethernet Port: 4 Port 10/100Base-Tx
- VoIP: 2 FXS Ports
- Host: 1 USB port
- Power Jack
- On/Off Switch Button
- Reset Button
- Wifi On/Off Switch Button
- Wifi Coding Button

NMS Software Features:

- Support OAM management based on IEEE802.3ah standard
- Support IEEE802.1Q VLAN, Port Based VLAN, (configurable in NMS)
- Support IEEE802.1P QOS, TOS, COS
- Support IEEE802.1d Spanning Tree
- Support MAC addresses limitation, (configurable in NMS)
- Support IGMP Snooping for multicast (configurable in NMS)
- Support IEEE802.3X full duplex, half duplex backpressure flow control
- Support bandwidth control

Gepon Application:

Gepon system consists of Gepon OLT, Gepon ONU and Optical Fiber Splitters. Gepon OLT is the master device that connects to Gepon ONU with Optical Fiber Splitters. Gepon ONU is the subscriber device that is set at the Subscribers'house. With the NMS installed in the Server PC at Gepon OLT side, administrators can manage/configure the Gepon ONU in the Gepon OLT's server room remotely.

With all gigabit fiber connected, Gepon system offers a large bandwidth that can meet or exceed the transmission requirements for IPTV, VoIP and Data services. It is a great option for Fiber To The Home, Fiber To The Building, etc solutions.

Specifications:

Standards	IEEE 802.3ah,IEEE 802.3,IEEE 802.3u,IEEE 802.3x,IEEE 802.3z,IEEE802.1d,IEEE 802.1P,IEEE 802.1Q, IEEE 802.1X, IEEE802.11b/g/n, RFC1155,RFC1157,RFC1112,RFC1113		
Topology	Star Topology		
Uplink Ports	1 Gepon SC port, 1.25Gbps		
GePON Transmission Rate	1.25Gbps		
GePON Transmission Distance	Up to 20Km		
Downlink Ports	4 Port 10/100Base-Tx LAN		
Wireless Standard	IEEE802.11n		
Wireless Transmission Rate	150Mps		
Wifi Range	Outdoors: 150 meters; Indoors: 100 meters		
VoIP Ports	2 RJ11 FXS Ports		
LED Indicators	Link, activity, Full/half duplex, speed, and power on diagnostic function		
Ethernet Cable	10Base-Tx: UTP category 3, 4,5, up to 100m 100Base-Tx: UTP category 5, up to 100m		
Fiber Cable	8.3µm, 8.7µm, 9µm and 10µm single mode fiber cable		
Power Supply	AC 96-260V, DC 12V, 2A, External Power Supply		
Temperature		Temperature	Humidity
	Working	0°C - 45°C	10% - 90%
Humidity	Standby	-40°C - 70°C	5% - 90% RH