1.25Gbps Upstream

2.5Gbps Downstream





ITU-T G.984.X GPON/IEEE802.3ah EPON standard

1.25G upstream 2.5G/1.25 downstream

1*GE High Speed LAN Port

1:128 Fiber Splitting Ratio

802.1Q VLAN,802.1P QoS DBA

Datasheet V1.1.6

CWDN8601GR1B-V2 1GE GPON EPON DUAL ONU Description:

The CWDN8601GR1B-V2 is ITU-T G.984.x based or IEEE802.3ah based dual mode ONU that supports 2.5G downstream and 1.25G upstream bandwidth for GPON, supports 1.25G downstream and 1.25G upstream bandwidth for EPON. It supports dual mode (EPON and GPON), can access EPON/GPON OLTs. It also comes with 1*10/100/1000Base-Tx Gigabit Ethernet LAN port that supports 1Gbps downstream bandwidth.

Main Features:

- Comes with 1G/EPON WAN Port, support 1.25G upstream and 2.5G/1.25G downstream
- Built with the well-round Realtek chipset, low cost and high performances
- Support Rich layer 2 Management features, applicable to the biggest ISP networks
- Built based on WDM, transmitting Data/IPTV/Voice over a Single fiber, max transmission distance can reach 20Km
- Max 1:128 Fiber ratio for GPON, max transmission distance can reach 20km
- Max 1:64 Fiber ratio for EPON, max transmission distance can reach 20km
- Support FBA (Flexible Bandwidth Assignation), dynamic assign bandwidth automatically
- High security, data encrypted at upstream and downstream directions
- Support Multicast, end users can optionally apply for VOD, Video conferencing, etc.
- Easy installation and Maintenance, support remote failure detect and locate. Saving your maintenance cost

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GPON Parameters

- ITU-T G.984.x GPON, -30dBm BOSA inside, SC/APC or SC/UPC connectors optional
- 1310nm upstream & 1490nm downstream
- Support G.984.1 General Characteristics
- Support G.984.2 Physical Media Dependent (PMD) layer specification
- Support G.984.3 Transmission convergence layer specification
- Support G.988 OMCI protocol
- GPON transceiver transmitting power: 0.5-5dBm, receiving sensitivity: -30dBm
- Transmission wavelength: Upstream: 1310nm / Downstream: 1490nm
- Support 1:128 Fiber Ratio at 20km transmission distance.
- Fiber Transmission cable: G.652 single mode optical fiber cable
- Configurable AES decryption on downstream payload.
- Configurable FEC on both upstream and downstream payloads.
- Multi-Application Processor queues for dedicated connections for in-band.
- Enhanced GPON debug and diagnostic functions.
- Support up to 8 Transmission Container (T-Cons), 32 GEM Port IDs
- Support NSR/SR Dynamic Bandwidth Allocation (DBA)
- Support Forward Error Correction (FEC)
- Maximum 2.5 Gbps Downlink/1.25 Gbps uplink
- Support Dying Gasp

GEPON Parameters

- IEEE 802.3ah GEPON standard, support standard OAM CTC 2.1, 3.0 China Telecom GEPON standard
- Built-in with a BOSA, SC/UPC or SC/APC connector
- 1310nm wavelength at upstream & 1490nm wavelength at downstream GEPON transceiver transmitting power: 0.5-5dBm,Optical receiving sensitivity:-28dBm
- 1:64 Fiber Ratio at 20km transmission distance.
- Fiber Transmission cable: G.652 Single mode optical fiber cable Support 1 LLID (Logical Link Identifier)
- Support 1 LOID (Logical ONU Identifier) Support Triple Churning Encryption algorithm
- Support NSR/SR Dynamic Bandwidth Allocation (DBA) Support Forward Error Correction (FEC)
- 4 QoS queues & SP Dispatching Algorithm over PON
- Maximum 1.25Gbps Downlink / 1.25Gbps Uplink
- Support Dying Gasp

Hardware Features:

- Fully Compatible with ,ITU-T G.984.x , IEEE802.3ah CTC 2.1, CTC 3.0 standard
- Offers 1*G/EPON SC Port, 2.5G / 1.25G Downstream, 1.25G Upstream
- Sensibility of Gepon Optical port: -2dBm to -27dBm
- Support 2Gbps Backplane bandwidth
- live LED Indicators for Power, PON, LOS and LAN
- Desktop Plug and play operation
- External Power Supply
  - Power Supply, AC 110V-240V input, DC 12V, 0.5A output, 4KV surge protection
  - Support Asia, Europe, U.S, U.K, AU standard power plugs

Software Features:

- Support IEEE802.1Q VLAN, Port Based VLAN
- Support IEEE802.1P QoS, Tos, Cos
- Support IEEE802.1d Spanning Tree
- Support IEEE802.1W Rapid Spanning Tree
- Support MAC address translation and MAC addresses limitation
- Support IGMP V1, V2 and IGMP Snooping for multicast
- Support IEEE802.3X full duplex, half duplex backpressure flow control
- Support MAC, IP, or TCP/UDP protocol based ACLs (Access Control protocol)
- Support Bandwidth Control
- Support CLI management, SNMP based NMS management and Monitor
- Support TR069 ACS management
- Support 4k VLAN
- Support MAC Learning, 1k MAC address table

Interoperable GPON OLT Models

- **CHONGWA** CWGT8000A, CWGT8016A, CWGT8000B, CWGT8016B, CWGT9000B series GPON OLTs
- **HUAWEI** MA5680T, MA5606T, MA5683T GPON OLT
  [Huawei R11/R13/R15/R17/R18 versions interoperable]
- **ZTE** C220, C300 GPON OLT
  [All ZTE OLT firmware versions interoperable]
- **Alcatel Lucent** 7342, 7360 ISAM GPON OLT
- **Nokia** 7360 ISAM GPON OLT
- **Fiberhome** AN5516-01, AN5516-02 GPON OLT
  [Fiberhome RP700, RP1000 versions interoperable]
- **Ericsson** BM1500 GPON OLT
- **Aurora** Trident7, T7-PIM-8802/COLT GPON OLT
- **Dlink** DPN-3012-E GPON OLT
- **Ubiquoss** C9500, C9516, C9016, C9264 GPON OLT
- **Raisecom** ISCOM5508, ISCOM5800E, ISCOM6800 GPON OLT
- **H3C** S3600-2P-OLT, S7502E, S7503E, S7506E, S7510E, S7506E-V GPON OLT

Interoperable Gepon OLT Models

- **CHONGWA** CWNA8800, CWNA9000T series
- **Huawei** MA5680T, MA5606T, MA5683T EPON OLT
  [Huawei R11/R13/R15/R17/R18 versions interoperable]
- **ZTE** C220, C300 EPON OLT
  [All ZTE OLT firmware versions interoperable]
- **Fiberhome** AN5516-01, AN5516-02 EPON OLT
  [Fiberhome RP700, RP1000 versions interoperable]
- **Furukawa,** Corecess GEPON OLTs

Specifications:

Standards	IEEE 802.3,IEEE 802.3u, IEEE802.3ab, IEEE802.3ah,IEEE 802.3x, IEEE802.1Q, IEEE802.1P, IEEE802.1D, IEEE802.11b/g/n, ITU-T G.984.1, ITU-T G.984.2, ITU-T G.984.3, ITU-T G.984.4		
Topology	Star Topology		
Uplink Ports	1 G/EPON SC port		
Downlink Ports	1*10/100/1000Base-Tx Gigabit LAN Port		
Transmission Rate	2.5G / 1.25G Downstream, 1.25G Upstream		
Transmission Distance	Maximum 20Km		
LED Indicators	Power, PON, LOS, GE		
Ethernet Cable	10Base-Tx: UTP category 3, 4, 5, up to 100m 100Base-Tx: UTP category 5, up to 100m 1000Base-Tx: UTP category 5, 5E, 6, up to 100m		
Fiber Cable	8.3μm, 8.7μm, 9μm and10μm single mode fiber cable		
Power Supply	AC 110-240V, DC 12V, 0.5A, External Power Supply, 4KV Surge protection		
Temperature Humidity		Temperature	Humidity
	Working	0℃ - 45℃	10% - 90%
	Standby	-40℃ - 70℃	5% - 90% RH