



BDCOM GP1501-1G Series Commercial Gigabit ONUs



BDCOM GP1501-1G Series Commercial Gigabit ONUs

Product Overview

BDCOM GP1501-1G is a new generation smart ONU for integrated multi-service networks. It is complied with the international standard ITU-T G.9844/988 and PRC Community Industry Standard *GEPON ONU in Access Technology Requirements* and China Telecom EPON Technical Requirement CTC2.0.



BDCOM GP1501-1G Series

Product Characteristics

Excellent Access Capacity

It supports the PON transmission rate of downlink 2.5Gbp/ uplink 1.25Gbps. Connected with BDCOM OLTs, it can realize 1:128 splitting ratio. The covering radius of the network can reach to 20km.

Secure Service Carrying Ability

For ensuring the secure service carrying ability of ONU, BDCOM has developed techniques

including VLAN, STP, port isolation, ACL, QoS and Broadcast Storm Control.

High Service Control Capability

It supports DBA and Rate-Limit. It supports advanced dynamic bandwidth distribution and accurate bandwidth limit, which enables users to share 2.5Gbps bandwidth resource appropriately. It also supports QOS function, which guarantees a reliable service quality and service priority.

Rich OMCI Functions

It supports the standard OMCI defined by ITU-T, including configuration, alarm, performance monitoring, fault isolation and security management, and it also supports private OMIC defined by BDCOM.

Complete Interaction Capacity

It is complied with ITU-T G.984/988 and relevant requirements for PRC Community Industry



Standard *GEPON ONU in Access Technology Requirements* and China Telecom EPON Technical Requirement CTC2.0.

Advanced Energy-saving Technique

It supports the "GreenTouch" architecture and "Smart@CHIP".

Technical Parameters

| Attributes | BDCOM GP1501-1G |
|----------------------|-----------------------------------------------------|
| User trial interface | 1 fixed 10/100M/1000M BASE-T auto-adaptation RJ45 |
| | interface |
| PON interface | downlink 2.5Gbps / uplink 1.25Gbps |
| | The network covering radius: 20km |
| | Type of the optical interface: SC/UPC |
| | Hi-sensible optical receiver: -27dBm |
| | Radiation power: 0.5 ~5dBm |
| | Security: ONU authentication mechanism |
| Standards | ITU-T G.984/G.988 |
| | PRC Community Industry Standard GEPON ONU in Access |
| | Technology Requirements |
| | IEEE 802.1D, Spanning Tree |
| | IEEE 802.1Q, VLAN |
| | IEEE 802.1w, RSTP |
| | ITU-T Y.1291 |
| VLAN | Port based VLAN |
| | IEEE 802.1Q VLAN |
| | CTC2.0 defined VLAN |
| Multicast | IGMP-Snooping |
| | CTC defined dynamic multicast |
| | MLD-Snooping |



| Backpressure flow control (half duplex)IEEE 802.3x flow control (full duplex)Head Of Line (HOL) mechanismHead Of Line (HOL) mechanismIEEE 802.1p, CoSFour priority queues on each portWR, SP and FIFORate limitReliabilityLoop detectDying-GaspPort protectionPort protectionPort storm controlPort storm controlPort storm controlDimensions mm (W×D×H)Iotal syslog or server syslogInstallation: plug and playSupports long-time use (For instance, 24 hours); The device running hot will not affect its performance or protection | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------|
| QoSHead Of Line (HOL) mechanism IEEE 802.1p, CoS Four priority queues on each port WR, SP and FIFO Rate limitReliabilityLoop detect Dying-GaspSecurityLimitation to the number of MAC addresses on the port Port protection Port storm controlManagementCLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (WxDxH)130 x 100 x 28 Installation: plug and playSupports long-time use (For instance, 24 hours); | | Backpressure flow control (half duplex) |
| QoSIEEE 802.1p, CoS Four priority queues on each port WR, SP and FIFO Rate limitReliabilityLoop detect Dying-GaspSecurityLimitation to the number of MAC addresses on the port Port protection Port storm controlManagementCLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (WxDxH)130 x 100 x 28 Installation: plug and playJup Construction Dimensions mm (WxDxH)Supports long-time use (For instance, 24 hours); | | IEEE 802.3x flow control (full duplex) |
| Four priority queues on each port WR, SP and FIFO Rate limit Loop detect Dying-Gasp Elimitation to the number of MAC addresses on the port Port protection Port storm control CLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslog 130 x 100 x 28 Installation: plug and play Supports long-time use (For instance, 24 hours); | | Head Of Line (HOL) mechanism |
| WR, SP and FIFO Rate limitReliabilityLoop detect Dying-GaspSecurityLimitation to the number of MAC addresses on the port Port protection Port storm controlManagementCLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (W×D×H)130 x 100 x 28 Installation: plug and playSupports long-time use (For instance, 24 hours); | QoS | IEEE 802.1p, CoS |
| Image: ReliabilityRate limitReliabilityLoop detect Dying-GaspSecurityLimitation to the number of MAC addresses on the port Port protection Port storm controlManagementCLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (W×D×H)130 x 100 x 28 Installation: plug and playSupports long-time use (For instance, 24 hours); | | Four priority queues on each port |
| ReliabilityLoop detect Dying-GaspSecurityLimitation to the number of MAC addresses on the port Port protection Port storm controlManagementCLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (W×D×H)130 × 100 × 28 Installation: plug and playSupports long-time use (For instance, 24 hours); | | WR, SP and FIFO |
| ReliabilityDying-GaspSecurityLimitation to the number of MAC addresses on the portPort protectionPort protectionPort storm controlPort storm controlManagementCLI, Web, SNMP and TELNETSoftware upgrade through TFTP and WEBLocal syslog or server syslogDimensions mm (W×D×H)130 x 100 x 28Installation: plug and playSupports long-time use (For instance, 24 hours); | | Rate limit |
| Dying-GaspSecurityLimitation to the number of MAC addresses on the portPort protectionPort storm controlPort storm controlManagementCLI, Web, SNMP and TELNETSoftware upgrade through TFTP and WEBLocal syslog or server syslogDimensions mm (WxDxH)130 x 100 x 28Installation: plug and playSupports long-time use (For instance, 24 hours); | Reliability | Loop detect |
| SecurityPort protection Port storm controlManagementCLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (W×D×H)130 x 100 x 28 Installation: plug and playSupports long-time use (For instance, 24 hours); | | Dying-Gasp |
| Port storm controlManagementCLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (W×D×H)130 x 100 x 28 Installation: plug and playSupports long-time use (For instance, 24 hours); | Security | Limitation to the number of MAC addresses on the port |
| Management CLI, Web, SNMP and TELNET Software upgrade through TFTP and WEB Local syslog or server syslog 130 x 100 x 28 Installation: plug and play Supports long-time use (For instance, 24 hours); | | Port protection |
| ManagementSoftware upgrade through TFTP and WEB Local syslog or server syslogDimensions mm (W×D×H)130 x 100 x 28 Installation: plug and playSupports long-time use (For instance, 24 hours); | | Port storm control |
| Local syslog or server syslogDimensions mm (W×D×H)130 x 100 x 28Installation: plug and playSupports long-time use (For instance, 24 hours); | | CLI, Web, SNMP and TELNET |
| Dimensions mm (W×D×H) 130 x 100 x 28 Installation: plug and play Supports long-time use (For instance, 24 hours); | Management | Software upgrade through TFTP and WEB |
| Dimensions mm (W×D×H) Installation: plug and play Installation: plug and play Supports long-time use (For instance, 24 hours); | | Local syslog or server syslog |
| Installation: plug and play Supports long-time use (For instance, 24 hours); | Dimensions mm (W×D×H) | 130 x 100 x 28 |
| | | Installation: plug and play |
| Heat dissipation The device running hot will not affect its performance of | Heat dissipation | Supports long-time use (For instance, 24 hours); |
| | | The device running hot will not affect its performance or |
| cause it break down. | | cause it break down. |
| Operating environment: 0 °C \sim 45 °C ; 10% \sim 85% | Environment requirements | Operating environment: 0 °C \sim 45 °C ; 10% \sim 85% |
| non-condensation | | |
| Environment requirements | | |
| Storage environment: -40 °C \sim 80 °C ; 5% \sim 95% | | Storage environment: -40 °C \sim 80 °C ; 5% \sim 95% |
| non-condensation | | non-condensation |
| Power supply DC12V/0.5A (external adaptor power supply) | Power supply | DC12V/0.5A (external adaptor power supply) |
| Power consumption <6W | Power consumption | <6W |



Ordering Information

| Model | Description |
|-----------------|------------------------------------------------------------|
| BDCOM GP1501-1G | FTTH/O ONU, 1 GPON interface (SC/UPC), 1 GE, plastic hull, |
| | DC12/0.5A, external adaptor (RTL solution) |

For More Information

For more information about the **BDCOM GP1501-1G ONU Series**, please contact your local BDCOM account representative.

Shanghai Baud Data Communication Co., LTD.

No.123, Juli Road, Pudong Zhangjiang High-Tech Park, Shanghai 201203, P.R.China www.bdcom.cn Tel: +86-21-50800666



Copyright ©Shanghai Baud Data Communication Co., LTD. 2015. All Rights Reserved.

This document is BDCOM Public Information.

BDCOM reserves the right to alter, update and otherwise change the information contained in the document from time to time without notice.