

TR-GP1501-1G



Techroutes Series HGU

Product Overview

Techroutes 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 GPON ONT in Access Technology Requirements and GPON Technical Requirement CTC2.0.

Main Characteristics

Excellent Access Capacity

It supports the PON transmission rate of downlink 2.5Gbp/ uplink 1.25Gbps. Connected with Techroutes 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, Techroutes 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 Techroutes.

Complete Interaction Capacity

It is complied with ITU-T G.984/988 and relevant requirements for PRC Community Industry Standard *GEAPON ONU in Access Technology Requirements* and Technical Requirement CTC2.0.

Advanced Energy-saving Technique

It supports the “Green Touch” architecture and “Smart@CHIP”.

Technical Specifications

| Attributes | TR-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 GPON 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 |
| QoS | Backpressure flow control (half duplex) |
| | IEEE 802.3x flow control (full duplex) |
| | Head Of Line (HOL) mechanism |
| | IEEE 802.1p, CoS |
| | Four priority queues on each port |
| | WR, SP and FIFO |
| | Rate limit |
| Reliability | Dying-Gasp |
| Security | Port protection |
| | Port storm control |

| | |
|--------------------------|--|
| Management | CLI, Web, SNMP and TELNET |
| | Software upgrade through TFTP and WEB |
| | Local syslog or server syslog |
| Dimensions mm (WxDxH) | 130 x 100 x 28 |
| | Installation: plug and play |
| Heat dissipation | Supports long-time use (For instance, 24 hours); |
| | The device running hot will not affect its performance or cause it break down. |
| Environment requirements | Operating environment: 0°C~45°C; 10%~85% non-condensation |
| | Storage environment: -40°C~80°C; 5%~95% non-condensation |
| Power supply | DC12V/0.5A (external adaptor power supply) |
| Power consumption | <6W |