

### PICOTEL PU-1501BD Series

#### Product Overview

PICOTEL PU-1501BD Series are smart ONUs with 1 Gigabit port designed for multi-service networks. It is complied with IEEE802.3ah and relevant requirements for EPON ONU regulated in Technical Requirements of YD/T 1475-2006—Ethernet-Based EPON and China Telecom EPON Technical Requirement. PICOTEL PU-1501BD Series can be well connected with OLTs from the mainstream manufacturers.



#### Product Characteristics

##### ■ High Access Capacity

It supports the symmetric uplink/downlink 1Gbps PON transmission rate. Connected with BDCOM OLTs, it can realize 1:64 splitting ratio. The network covering radius can reach to 20km.

##### ■ Secure Service Carrying Ability

For ensuring the secure service carrying ability of ONU, PICOTEL has developed techniques including VLAN, STP, ACL, QoS, security filtering 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 appropriately share 1Gbps bandwidth resource. It also supports QOS function, which guarantees a reliable service quality and service priority.

##### ■ Rich OAM Functions

It supports standard OAM and expanded OAM defined by Chinese Telecom CTC2.1/3.0, including configuration, alarm, performance monitoring, fault isolation and security management, and it also supports private OAM defined by BDCOM.

### ■ Complete Interaction Capacity

It is complied with IEEE802.3ah and relevant requirements for EPON ONU regulated in Technical Requirements of YD/T 1475-2006—Ethernet-Based EPON and China Telecom EPON Technical Requirement 2.1/3.0.

### ■ Advanced Energy-saving Technique

It supports the “GreenTouch” architecture and “Smart@CHIP”.

## Technical Parameters

Item	PU-1501BD
User side interface	1 fixed 10/100/1000M BASE-T auto-adaptive RJ45 interface
PON Interface	Symmetric uplink/downlink 1Gbps transmission rate Network coverage diameter: 20KM Type of the optical interface: SC/UPC Hi-sensitivity optical receiver: $\leq -27$ dBm Radiation power: 0-4 dBm Security: ONU authentication mechanism
Standards	IEEE802.3ah PRC Community Industry Standard (YD/T 1475-2006) IEEE 802.1D, Spanning Tree IEEE 802.1Q, VLAN IEEE 802.1w, RSTP ITU-T Y.1291
VLAN	64 VLAN (1~4094) Port based VLAN IEEE 802.1Q VLAN CTC2.1/3.0 defined VLAN
Multicast	IGMP-Snooping CTC defined dynamic multicast function MLD-Snooping

QoS	<ul style="list-style-type: none"> <li>Backpressure flow control (half-duplex)</li> <li>IEEE 802.3x flow control (full duplex)</li> <li>Prevent Head of Line mechanism</li> <li>IEEE 802.1p, CoS</li> <li>Four priority queues on each port</li> <li>WR, SP and FIFO queue schedule algorithms</li> <li>Port rate limit</li> </ul>
Reliability	<ul style="list-style-type: none"> <li>Loop detect</li> <li>Dying-Gasp</li> </ul>
Network Security	<ul style="list-style-type: none"> <li>MAC address number limit</li> <li>Port protection</li> <li>Port storm control</li> </ul>
Management configuration	<ul style="list-style-type: none"> <li>Management modes including CLI, TELNET</li> <li>Software upgrade through TFTP and WEB</li> <li>Local or server syslog</li> </ul>
Dimensions (W×D×H)	<p>mm 100×75×25</p> <p>Installation: plug and play</p>
Heat dissipation	The heat generated by the device in a long-time use (24 hours) cannot lead to the degrading of the performance and the deformation of the components.
Environment	<ul style="list-style-type: none"> <li>Operating environment: 0 45 ; 10% 85% non-condensing</li> <li>Storage environment: -40 -80 ; 5%-95% non-condensing</li> </ul>
Power supply	DC12V/0.5A (external adaptor power supply)
Power consumption	6W