

# BDCOM P5916 Series

Medium-Level Chassis Modularized EPON OLT



### **BDCOM P5916 Series**

## Product Overview

BDCOM P5916 Series, which has high reliability, highly dense EPON access and robust switching and routing abilities, is a new generation of broadband and multiservice access OLT devices oriented towards the service-integrated network.

BDCOM P5916 Series adopts the BDROS operating system whose intelligent property is owned by BDCOM, integrates with Ipv6, network security, EPON, supports data, voice and video, and provides continuous forwarding, graceful restarting and ring protection, improving the work efficiency and securing the maximum running time.

BDCOM P5916 Series supports 2 slots for console panels, 2 GE slots and 12 gigabit slots. P5916 Series also supports the console board and the "1+1" backup of power supply. P5916 Series can be widely applied in Telecom operators, FTTX of the broadcast and TV operators, automatic power distribution, power-consumed information collection and FTTH in the electric power industry.



**BDCOM P5916** 

## Product Characteristics

- BDCOM P5916 Series abides by IEEE802.3ah standard and meets relevant requirements of EPON OLT regulated in Technical Requirements of "YD/T 1475-2006 and China Telecom EPON Technical Requirements.
- BDCOM P5916 Series is cabinet modularized device with high density and large capacity so they are easy for expansion and upgrade.



- BDCOM P5916 Series has L2/L3/L4 functions, supports 768Gbps backplane bandwidth, static routes, RIP, OSPF and so on. BDCOM P5916 Series supports advanced functions such as QoS, bandwidth control and multicast, adding extra values to the whole network.
- BDCOM P5916 Series has high reliability. The key modules of the system like the control
  unit and the power supply can be backed up through the "1+1" mode. Meanwhile, the Hitless
  Protection System (HPS) secures the high reliability of P5916 Series. After the redundancy
  control module is configured, the highest reliability can be reached.
- A single EPON card of BDCOM P5916 Series supports 4 EPON ports. BDCOM P5916, therefore, supports up to 48 EPON ports, a maximum optical coupling ratio of 1:64, up to 3584 ONUs and a 20km transmission distance.
- P5916 Series supports various interface types including GE, TE and EPON.
- BDCOM P5916 Series supports CTC standard, automatic detection and is compatible with ONUs from different manufacturers.
- BDCOM P5916 Series supports the RFC 1213 SNMP protocol. The internal network management mode adopts the Telnet-based configuration management or the SNMP-based configuration management, realizing uniform network management based on the Broad Director network management platform.

## Technical Parameters

| Items     | Description   |    |
|-----------|---|----|
|           | Maximum coupling ratio, 1:64  |    |
| System    | 768G backplane bandwidth  |    |
| Capacity  | 2 slots for console panels, 2 GE service slots and 12 gigabit service slots |    |
|           | MAC capacity: 64K   |    |
| Interface | Max number of 10GE ports  | 4  |
|           | Max number of GE ports  | 48 |
|           | Maximum number  | 48 |



|                  | of PON ports   |  |  |
|------------------|--|--|--|
| PON Interface    | Uplink and downlink symmetric transmission rate: 1.25Gbps        |  |  |
|                  | Supporting standard EPON modules, such as PX20, PX20+, PX20++;   |  |  |
|                  | Security: ONU authentication mechanism                           |  |  |
|                  | IEEE802.3ah  |  |  |
| Standard         | YD-T 1475-2006 access network requires EPON basis                |  |  |
|                  | YD-T 1771-2008 access network requires EPON intercommunication   |  |  |
|                  | China Telecom EPON standard CTC2.1/3.0                           |  |  |
|                  | IEEE 802.1D, Spanning Tree                                       |  |  |
|                  | IEEE 802.1Q, VLAN  |  |  |
|                  | IEEE 802.1w, RSTP  |  |  |
|                  | IEEE 802.3ad LACP  |  |  |
|                  | Ethernet – II  |  |  |
| QoS              | Backpressure flow control (half duplex)                          |  |  |
|                  | IEEE 802.3x flow control (full duplex)                           |  |  |
|                  | IEEE 802.1p, CoS   |  |  |
| QUO              | WR, SP and FIFO  |  |  |
|                  | Limiting the uplink/downlink rate based on each ONU              |  |  |
|                  | Supporting DBA and SLA   |  |  |
| VLAN             | Port-based VLAN  |  |  |
|                  | QinQ, support flexible QinQ                                      |  |  |
| Layer 3 function | Supporting static routing, Ripv1/v2, OSPF, etc.                  |  |  |
| Multicast        | IGMP Snooping  |  |  |
|                  | Controllable multicast   |  |  |
| Reliability      | Unidirectional Link Detection (UDLD)                             |  |  |
|                  | Hot swap of the service board and power supply module            |  |  |
|                  | Optical path protection of EPON                                  |  |  |
|                  | Abnormal luminescence overhaul of ONU, such as long luminescence |  |  |



|                     | detection   |  |
|---------------------|---|--|
| Network<br>Security | Limiting the maximum number of users on each port                                 |  |
|                     | Port isolation  |  |
|                     | Packet storm control  |  |
|                     | Flow-based ACL access control function  |  |
|                     | Transmission data encryption on the PON interface                                 |  |
|                     | Multiple management modes such as CLI, Web, SNMP and TELNET                       |  |
| Configuration       | Conducting software upgrade through TFTP  Command prompt in English or in Chinese |  |
| Management          |   |  |
|                     | Debug output  |  |
| Physical            | Dimensions mm (W×D×H) : 399.2 x315 x 482.6  |  |
| Characteristics     | Installation: standard 19-inch rack-mounted                                       |  |
| Environment         | Working condition: 0°C-45°C; 10%-85% non-condensing                               |  |
| Requirements        | Storage condition: -40℃-80℃; 5%-95% non-condensing                                |  |
| Power Supply        | Input voltage: AC90-264V, DC 36~72V   |  |
|                     | Dual power supply, DC/AC power supply and power module hot swap                   |  |
|                     | Overcurrent voltage protection  |  |

# Ordering Information

| vice                               |  |  |  |
|------------------------------------|--|--|--|
| ach                                |  |  |  |
|                                    |  |  |  |
| Power Supply of BDCOM P5916 Series |  |  |  |
| max                                |  |  |  |
|                                    |  |  |  |
| max                                |  |  |  |
|                                    |  |  |  |
| Chassis of BDCOM P5916 Series      |  |  |  |
|                                    |  |  |  |
| r                                  |  |  |  |



| GE Service Line Card of BDCOM P5916 Series   |   |  |  |  |
|--|---|--|--|--|
| LP59-4PON-SFPB                               | 4-port OLT EPON interface board, SFP interface (excluding the OLT SFP |  |  |  |
|  | optical module)   |  |  |  |
| LP59-4GE-TX/SFP                              | 4-port gigabit uplink board (TX/SFP interface)                        |  |  |  |
| 10GE Service Line Card of BDCOM P5916 Series |   |  |  |  |
| LP59-2TE-SFP+                                | 2-port 10GE uplink board, SFP+ interface                              |  |  |  |
| EPON Optical Module                          |   |  |  |  |
| OLT-GSFP-20                                  | OLT SFP module (PX20+, uplink and downlink 1.25G, TX wavelength       |  |  |  |
|  | 1490nm, RX wavelength 1310nm, SC interface)                           |  |  |  |

#### **For More Information**

For more information about BDCOM P5916 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. 2018. 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.