EPON Gigabit SFU

P1501DS ONU

Product Overview

BDCOM P1501DS is smart ONU 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.
BDCOM P1501DS can be well connected with OLTs from the mainstream manufacturers.

Product Characteristics

Excellent Access Capacity

P1501DS supports the symmetric uplink/downlink 1.25Gbps 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, BDCOM has developed techniques including VLAN, STP, ACL, QoS, security filtering and Broadcast Storm Control.

High Service Control Capability

P1501DS supports DBA and Rate-Limit. It supports advanced dynamic bandwidth distribution and accurate bandwidth limit, which enables users to appropriately share 1.25Gbps bandwidth resource. It also supports QOS function, which guarantees a reliable service quality and service priority.

Rich OAM Function

P1501DS 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

P1501DS 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

P1501DS supports the “GreenTouch” architecture and “Smart@CHIP”.

Support 1.25Gbps uplink/downlink bandwidth

Efficient bandwidth usage and Ethernet services

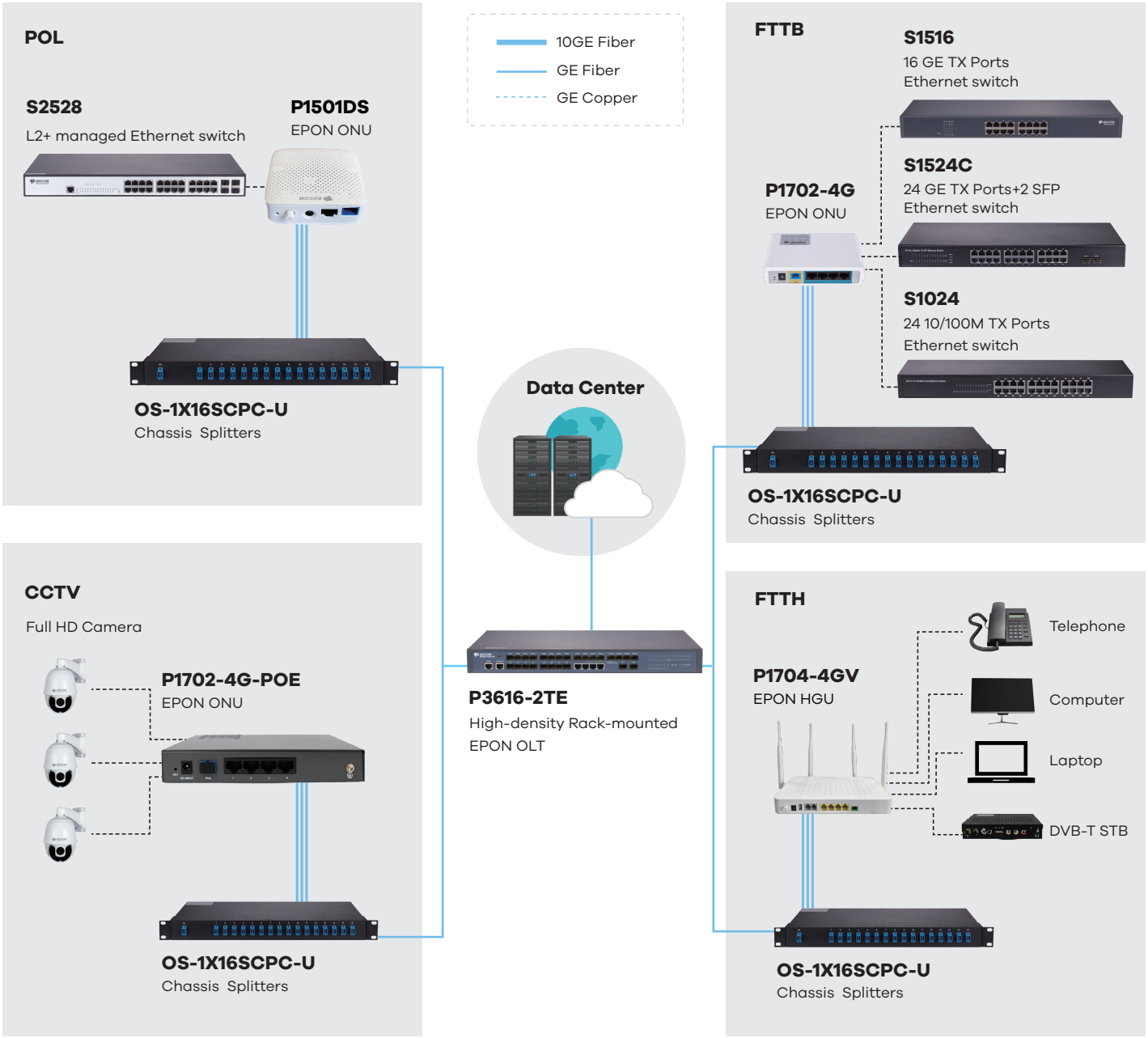
The splitting ratio ups to 1:64

Model Lists

P1501DS EPON ONU

- 1 EPON interface (SC/UPC)
- 1 GE TX Port

Application Diagram



System Performance

Item	P1501DS		
Service interface			
PON ports	1 SC/UPC		
Ethernet ports	1 GE TX		
Optical power	TX power 0-4 dBm		RX sensitive <-27dBm
AC adaptor	Input:100-240V AC		Output:12V/0.5A
Max. consumption (W)	6		
System capacity			
Chassis	Dimensions (WxDxH mm)	80 x 75 x 24	Weight (Kg)(empty) 0.1
Package	Dimensions (WxDxH mm)	178 x 126 x 35	Weight (Kg) 0.2
Environmental Specifications			
Operating	Temperature 0~45℃		Humidity 10%~85% (noncondensing)
Storage	Temperature -40℃ ~85℃		Humidity 5%~95% (non-condensing)
Accessories			
Parts	Power adaptor		

Technical Specifications

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

- 4K VLAN
- Port based VLAN
- IEEE 802.1Q VLAN
- Tag/Transparent/Aggregation
- /Trunk/Translation mode VLAN
- CTC2.1/3.0 defined VLAN

EPON Service

- Triple-churning algorithm encryption
- MAC/Loid/Hybrid authentication

QoS

- Backpressure flow control (half-duplex)
- IEEE 802.3x flow control (full duplex)
- Against Head of Line mechanism
- IEEE 802.1p, CoS
- Four priority queues on each port
- WR, SP and FIFO queue schedule algorithms
- Port rate limit
- SLA and DBA

Management

- Management modes including CLI,
- HTTP, SNMP and TELNET
- Software upgrade through TFTP and WEB, OAM, etc.
- Local or server syslog

Network Security

- MAC address number limit
- MAC ACL
- L2~4 IP ACL
- Port protection
- Port storm control

Multicast

- IGMP-Snooping
- CTC defined dynamic multicast function
- MLD-Snooping
- Multicast group limitation
- Multicast fast-leave

Reliability

- Loop detection
- Dying-Gasp
- TX/RX optical power alarm

Ordering Information

Model	Description
P1501DS	FTTH/O ONU, 1 EPON interface (SC/UPC), 1 GE TX port, plastic hull, DC12V/0.5A, external adaptor