

S2500-P SERIES



Varied Service
Characteristics Versatile
IPv6 Solution Complete
Security Mechanism



Carrier-Level High
Reliability
Layer-3 Routing
Functions



Advanced Hardware
Architecture and
Industry-leading Port
Density



Supports Maximum
24 GE PoE Ports
and 4 GE SFP Uplink
Ports

Product Overview

BDCOM S2500-P Series is a new-generation intelligent PoE access switch designed for carrier's IP MAN and enterprise networks. Based on the new-generation high-performance hardware and BDROS platform, it supports functions such as ACL, QinQ and QoS. Its simple management mode and flexible installation can meet the requirement of any complicated scenarios;

BDCOM S2500-P Series has 3 models: S2510P, S2520-P and S2528-P;

Product Characteristics

Carrier-Level Ethernet Access Switch

S2500-P Series supports the carrier-level Ethernet-ring protection protocol with less than 50ms recovery time, STP/RSTP/MSTP, backup uplink ports, and LACP link aggregation to cater to the requirements of high reliability of carriers;

S2500-P Series has powerful ACL functions to access and control L2-L7 data based on physical port, providing carriers flexible and various policy control methods;

S2500-P Series supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade;

S2500-P Series supports various L2 multicast functions such as IGMP-snooping, fast-leave and MVR to fully meet the operation requirements of carrier's IPTV.



Product Characteristics

Intelligent PoE+

S2500-P Series supports IEEE 802.3AF/AT PoE standard, and power mapping scales up to a maximum of 370W of PoE+ power;

S2500-P Series supports PoE non-stop power supply. The PoE+ power is maintained during a switch reload;

S2500-P Series supports manual and dynamic PoE power allocation;

S2500-P Series supports up to 2KV thunder-proof of the PoE port and power supply;

Enhanced QoS

S2500-P Series supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority, better streamlining carrier's services;

S2500-P Series provides flexible bandwidth control policies, supporting port-/flow-based flow limit, ensuring the line speed forwarding of each port;

S2500-P Series supports multiple queue schedule algorithms such as SP, WRR and "SP + WRR";

Security+

Equipment-level security: The advanced hardware infrastructure design realizes the level-based packet schedule and packet protection, prevents DoS-/TCP-related SYN Flood, UDP Flood, Broadcast Storm or large traffic attacks, and supports level-based command line protection, endowing different levels of users with different management permissions.

Perfect security authentication mechanisms: IEEE 802.1x, Radius and BDTacacs+.

S2500-P Series supports storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.

S2500-P Series supports perfect ring detection mechanism, ensuring the long-term stable running of network.

S2500-P Series supports port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.

Easy Management and Maintenance

S2500-P Series supports many management modes such as the CLI, Telnet, SSH, SSL and SNMP;

S2500-P Series supports the WEB management mode, which is easy and efficient for installing and debugging the device;

S2500-P Series supports FTP,TFTP and SFTP;

S2500-P Series supports ISSU (In-Service Software Upgrade);

S2500-P Series supports SNMP and BDCOM NMS smart network management platform. The combination realizes automatic equipment discovery, network topology management, equipment configuration management, performance data statistics and analysis and trouble management;

S2500-P Series supports Zero Touch Provisioning(ZTP) function to minimize manual operator intervention and helps reduce customers' initial deployment costs.

Model Lists

S2510P



- 8 GE PoE ports
- 2 1000M SFP ports

S2520-P



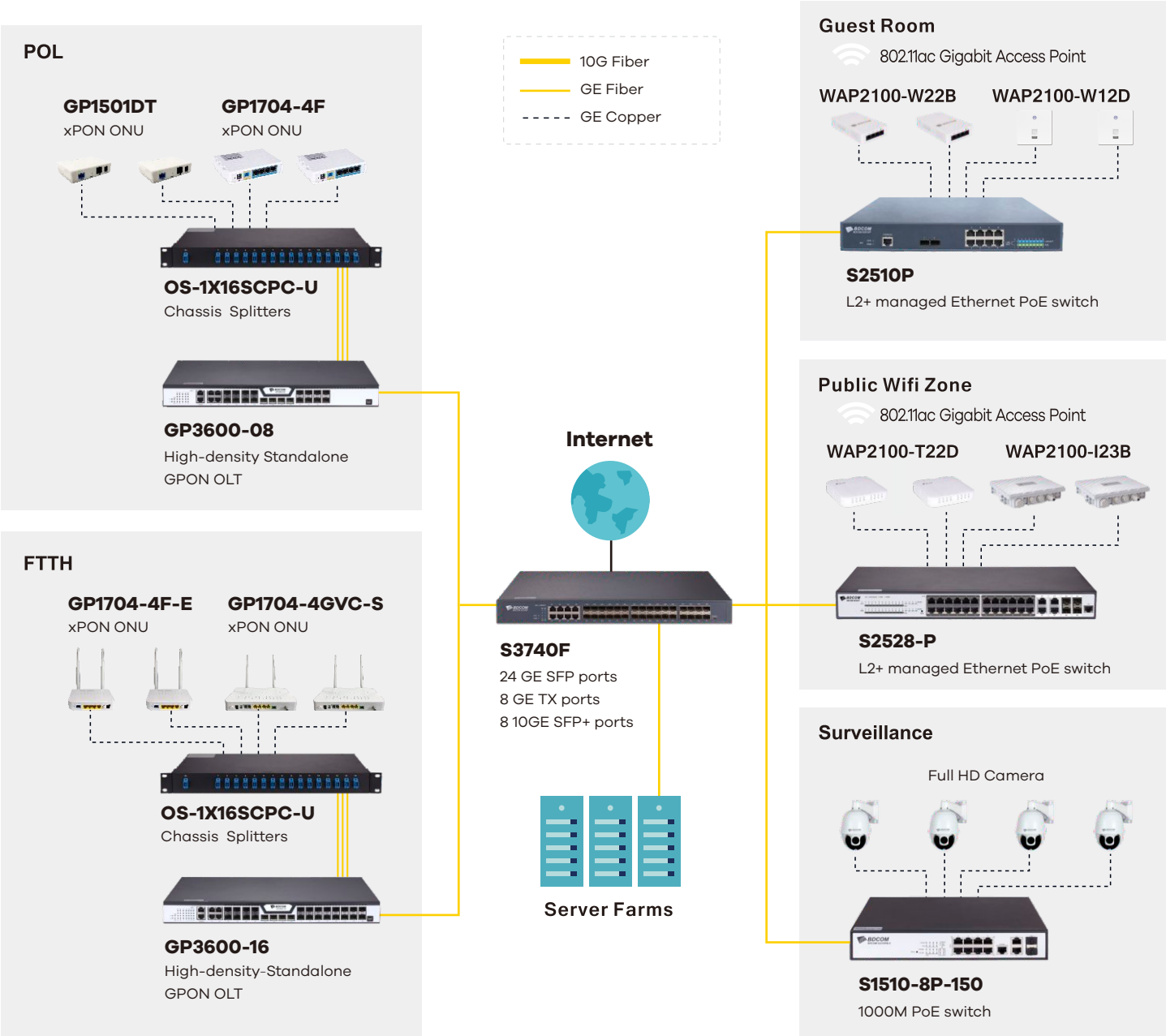
- 16 GE PoE ports
- 2 GE TX/SFP combo ports
- 2 100/1000M SFP ports

S2528-P



- 24 GE PoE ports
- 4 GE TX/SFP combo ports

Application Diagram



Product Specifications

Item		S2510P	S2520-P	S2528-P
Interface		8 GE PoE ports, 2 1000M SFP ports	16 GE PoE ports, 2 GE TX/SFP combo ports 2 100/1000M SFP ports	24 GE PoE ports, 4 GE TX/SFP combo ports
Console		1 RJ45 port, 1 RST button	1 RJ45 port, 1 RST button	1 RJ45 port, 1 RST button
Backplane		20 Gbps	40 Gbps	56 Gbps
Forwarding rate		15 Mpps	30 Mpps	42 Mpps
Chassis	Dimensions (WxDxH)(mm)	340x200x44	440x210x44	440x210x44
	Weight(KG)(empty)	1.68	3.4	4.5
Package	Dimensions (WxDxH)(mm)	370x230x80	555x295x88	555x295x88
	Weight(KG)	2.5	4	4.5
Power consumption	no-load	<7W	<15W	<17W
	full-load	142.5W	261.4W	393.5W
Power supply	AC: 100V-240V, 50Hz±10%	150W	265W	400W
POE power budget		130 W	250W	370 W
Total output BTU (1000BTU/H=293W)		511.95	892.15	1365.19
Fan number		1	2	2
Noise@25°C(dBA)		41.5	37.5	37.5
MTBF(H)		>50,000	>50,000	>50,000
Forwarding mode		Store-forward		
Flash (MB)		16		
DRAM (MB)		128		
MAC		8K		
Buffer size(MB)		41		
Jumbo frame		9K		
Total SVI		10		

Features

VLAN

- 4K Active VLAN
- QinQ & Selective QinQ
- GVRP, Private VLAN
- Voice VLAN

Spanning Tree

- 802.1D (STP)
- 802.1W (RSTP) and 802.1S (MSTP)
- BPDU guard, root guard and loopback guard

Multicast

- IGMP v1/2/3
- IGMP Snooping
- IGMP Fast Leave
- IGMP Filter
- MVR

IP

- Static route
- RIP, OSPF
- 512 routing table
- IPv4/v6 dual stack
- DHCP Server/Client/Relay

QoS

- CAR, HQoS, MAC/IP/TCP/UDP/VLAN/COS/DSCP/TOS based
- QoS,802.1P/DSCP priority re-labeling, SP, WRR, and "SP+WRR",
- Tail-Drop, WRED, flow monitoring and traffic shaping

Security

- Port isolation, Port security, and "IP+MAC+port" binding, MAC sticky, DHCP Snooping and option 82, DAI & IP source guard, PPPoE+,
- IEEE 802.1x, Radius and BDTacacs+
- L2/L3/L4 ACL flow identification and filtration Anti-attack from DDoS, TCP's SYN Flood, UDP Flood, etc.
- Broadcast/multicast/unknown unicast storm-control
- MD5, SHA-256, RSA-1024, AES256, etc.

Reliability

- Static/LACP link aggregation, Interface backup
- EAPS and ERPS
- ISSU

Management

- Console, Telnet, SSH v1/2, HTTP, HTTPS, SNMP v1/v2/v3, RMON
- TFTP, FTP, SFTP
- NTP
- ZTP(Zero Touch Provisioning)
- SPAN, RSPAN

Accessories

- Power cord, rackmount kits, console cable, anti-slipping pad

Environment

- Operating temperature/humidity: 0°C -50°C, 10%-90% non-condensing
- Storage temperature/humidity: -20°C -70°C, 5%-95% non-condensing

Certification

CE, FCC, ROHS

Ordering Information

Item	Description
S2500-P Series PoE Switches	
S2510P	Ethernet PoE switch with 10 GE ports (1 console port, 8 GE PoE ports, 2 1000M SFP ports, 1 standard AC220V power supply, 150W, the cooling fan, 1U, rack-mounted installation)
S2520-P	Ethernet PoE switch with 20GE ports (1 console port, 16 GE PoE ports, 2 100/1000M SFP ports, 2GE TX/SFP combo ports, 1 standard AC220V power supply, 265W, the cooling fan, 1U, standard 19-inch rack-mounted installation)
S2528-P	Ethernet PoE switch with 28 GE ports (1 console port, 24 GE PoE ports, 4 GE TX/SFP combo ports, 1 standard AC220V power supply, 400W, the cooling fan, 1U, standard 19-inch rack-mounted installation)
Optical Modules	
100M Optical Modules	
FSFP-SX-1310	100M SFP multi-mode (2Km, 1310nm, LC, DDM)
FSFP-LX-15	100M SFP single-mode (15Km, 1310nm, LC, DDM)
FSFP-LX-40	100M SFP single-mode (40Km, 1310nm, LC, DDM)
FSFP-ZX-80	100M SFP single-mode (80Km, 1550nm, LC, DDM)
FSFP-LX-SM1310-20-BIDI	100M SFP single-mode, single fiber (20Km, TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-20-BIDI	100M SFP single-mode, single fiber (20Km, TX1550/RX1310, LC, DDM)
FSFP-LX-SM1310-40-BIDI	100M SFP single-mode, single fiber (40Km, TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-40-BIDI	100M SFP single-mode, single fiber (40Km, TX1550/RX1310, LC, DDM)
FSFP-LX-SM1310-80-BIDI	100M SFP single-mode, single fiber (80Km, TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-80-BIDI	100M SFP single-mode, single fiber (80Km, TX1550/RX1310, LC, DDM)
GE Optical Modules	
GSFP-TX-B	GE SFP single-to-RJ45 module
GSFP-SX-D	GE SFP multi-mode (500m, 850nm, LC, DDM)
GSFP-LX-10-D	GE SFP single-mode (10Km, 1310nm, LC, DDM)
GSFP-LX-20-D	GE SFP single-mode (20Km, 1310nm, LC, DDM)
GSFP-LX-40-D	GE SFP single-mode (40Km, 1310nm, LC, DDM)
GSFP-ZX-80-D	GE SFP single-mode (80Km, 1550nm, LC, DDM)
GSFP-ZX-120-D	GE SFP single-mode (120Km, 1550nm, LC, DDM)
GSFP-LX-SM1310-10-BIDI	GE SFP single-mode, single fiber (10Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-10-BIDI	GE SFP single-mode, single fiber (10Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-20-BIDI	GE SFP single-mode, single fiber (20Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-20-BIDI	GE SFP single-mode, single fiber (20Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-40-BIDI	GE SFP single-mode, single fiber (40Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-40-BIDI	GE SFP single-mode, single fiber (40Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1490-80-BIDI	GE SFP single-mode, single fiber (80Km, TX1490/RX1550, LC, DDM)
GSFP-LX-SM1550-80-BIDI	GE SFP single-mode, single fiber (80Km, TX1550/RX1490, LC, DDM)
GSFP-LX-SM1490-120	GE SFP single-mode, single fiber (120Km, TX1490/RX1550, LC, DDM)
GSFP-LX-SM1550-120	GE SFP single-mode, single fiber (120Km, TX1550/RX1490, LC, DDM)

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