



# S2200PB SERIES

Carrier-Level High Reliability Layer-3 Routing Functions



Varied Service Characteristics Versatile IPv6 Solution Complete Security Mechanism



Supports Maximum 24 100M POE Ports and 2 GE TX/SFP Combo Uplink Ports



Advanced Hardware Architecture and Industry-leading Port Density

### **Product Overview**

BDCOM S2200PB 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 S2200PB Series has 3 models: S2210PB, S2218PB and S2226PB.

#### **Product Characteristics**

#### **Carrier-Level Ethernet Access Switch**

S2200PB Series supports the carrier-level Ethernetring 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;

S2200PB Series has powerful ACL functions to access and control L2-L7 data based on physical port, providing carriers flexible and various policy control methods:

S2200PB Series supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade;

S2200PB 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+

S2200PB Series supports IEEE 802.3AF/AT POE standard, and power mapping scales up to a maximum of 370W of PoE+ power.

S2200PB Series supports POE non-stop power supply. The PoE+ power is maintained during a switch reload.

S2200PB Series supports manual and dynamic POE power allocation.

S2200PB Series supports up to 2KV thunder-proof of the POE port and power supply.

#### **Enhanced QoS**

S2200PB Series supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority, better streamlining carrier's services.

S2200PB Series provides flexible bandwidth control policies, supporting port-/flow-based flow limit, ensuring the line speed forwarding of each port.

S2200PB 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+.

S2200PB Series supports storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.

S2200PB Series supports perfect ring detection mechanism, ensuring the long-term stable running of network.

S2200PB Series supports port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.

#### Easy Management and Maintenance

S2200PB Series supports many management modes such as the CLI, Telnet, SSH, SSL and SNMP.

S2200PB Series supports the WEB management mode, which is easy and efficient for installing and debugging the device.

S2200PB Series supports FTP,TFTP and SFTP.

S2200PB Series supports ISSU (In-Service Software Upgrade).

S2200PB 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.

S2200PB Series supports Zero Touch Provisioning(ZTP) function to minimize manual operator intervention and helps reduce customers' initial deployment costs.

#### **Model Lists**

#### S2210PB-C



- · 8 100M TX ports
- · 2 GE TX/SFP combo ports

#### **S2218PB**



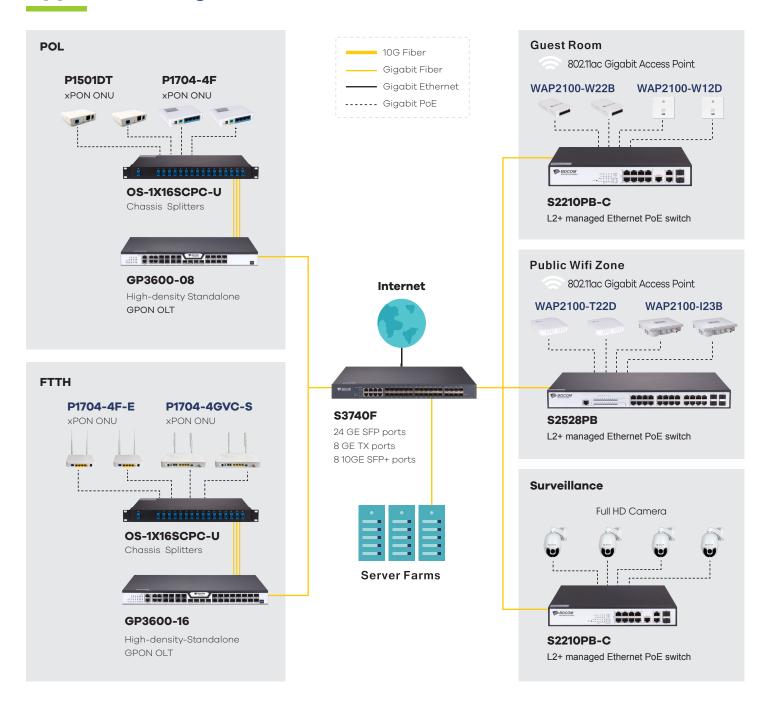
- 16 100M POE ports
- · 2 GE TX/SFP combo ports

#### **S2226PB**



- · 24 100M POE ports
- · 2 GE TX/SFP combo ports

## **Application Diagram**



## **Product Specifications**

Item		S2210PB-C	S2218PB	S2226PB
Interface		8 100M POE ports, 2 GE TX/SFP combo ports	16 100M POE ports, 2 GE TX/SFP combo ports	24 100M POE ports, 2 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		5.6 Gbps	7.2 Gbps	8.8 Gbps
Forwarding rate		4.2Mpps	5.4Mpps	6.6Mpps
Chassis	Dimensions (WxDxH)(mm)	280x180x44	440x230x44	440×230×44
	Weight(KG)(emp	oty) 1.68	3.3	3.5
Package	Dimensions (WxDxH)(mm)	370×230×80	495x315x72	495x315x72
	Weight(KG)	2.5	4.3	4.5
Power consumption	no-load	< 7W	< 12W	< 15W
	full-load	142.5W	291.7W	393.5W
Power supply	AC: 100V-240V, 50Hz±10%	150W	330W	400W
Total output BTU (1000BTU/H		293W) 511.95	1126.28	1365.19
Fan number		1	1	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)			4.1	
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/v2/v3
- · IGMP Snooping
- · IGMP Fast Leave
- MVR, IGMP filter

#### IΡ

- Static route
- 512 routing table
- IPv4/v6 dual stack

#### Certification

CE, FCC, ROHS

#### QoS

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

#### Security

- Port isolation, Port security, and "IP+MAC+port" binding MAC stickyDHCP Snooping and option 82, DAI & IP source guard, PPPoE+,
- IEEE 802.1x, Radius and BDTacacs+
- L2/L3/L4 ACL flow identification and filtrationAnti-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

#### Accessories

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

#### **Environment**

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

**BDCOM S2200PB Series** 

# **Ordering Information**

Item	Description	
S2200PB series POE Swit	ches	
S2210PB-C	Ethernet POE switch with 8 100M TX ports and 2 GE uplink ports (1 console port 8 100M POE ports, 2 GE TX/SFP combo ports, the standard AC220V power supply 150W, the cooling fan, 1U, desktop installation)	
S2218PB	Etthernet POE switch with 16 100M TX ports and 2 GE uplink ports (1 console por 16 100M POE ports, 2 GE TX/SFP combo ports, the standard AC220V power suppl 330W, the cooling fan, 1U, standard 19-inch rack- mounted installation)	
S2226PB	Ethernet POE switch with 24 100M TX ports and 2 GE uplink ports (1 console ports 100M POE ports, 2 GE TX/SFP combo ports, the standard AC220V power supparts 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 FSFP-LX-SM1550-20-BIDI	100M SFP single-mode, single core bidirectional (20Km, TX1310/RX1550, LC, DDM) 100M SFP single-mode, single core bidirectional (20Km, TX1550/RX1310, LC, DDM)	
FSFP-LX-SM1310-40-BIDI FSFP-LX-SM1550-40-BIDI	100M SFP single-mode, single core bidirectional (40Km, TX1310/RX1550, LC, DDM) 100M SFP single-mode, single core bidirectional (40Km, TX1550/RX1310, LC, DDM)	
FSFP-LX-SM1310-80-BIDI FSFP-LX-SM1550-80-BIDI	100M SFP single-mode, single core bidirectional (80Km, TX1310/RX1550, LC, DDM) 100M SFP single-mode, single core bidirectional (80Km, TX1550/RX1310, LC, DDM)	
GE Optical Modules		
GSFP-TX-B	GE SFP-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 GSFP-LX-SM1550-10-BIDI	GE SFP single-mode, single core bidirectional (10Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (10Km, TX1550/RX1310, LC, DDM)	
GSFP-LX-SM1310-20-BIDI GSFP-LX-SM1550-20-BIDI	GE SFP single-mode, single core bidirectional (20Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (20Km, TX1550/RX1310, LC, DDM)	
GSFP-LX-SM1310-40-BIDI GSFP-LX-SM1550-40-BIDI	GE SFP single-mode, single core bidirectional (40Km, TX1310/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (40Km, TX1550/RX1310, LC, DDM)	
GSFP-LX-SM1490-80-BIDI GSFP-LX-SM1550-80-BIDI	GE SFP single-mode, single core bidirectional (80Km, TX1490/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (80Km, TX1550/RX1490, LC, DDM)	
GSFP-LX-SM1490-120 GSFP-LX-SM1550-120	GE SFP single-mode, single core bidirectional (120Km, TX1490/RX1550, LC, DDM) GE SFP single-mode, single core bidirectional (120Km, TX1550/RX1490, LC, DDM)	

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