



# S2200-B 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  
100M Ports and 4 GE  
Uplink Ports

## Product Overview

BDCOM S2200-B Series is a new-generation intelligent 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 S2200-B Series has 3 models: S2212-B, S2220-B and S2228-B.

## Product Characteristics

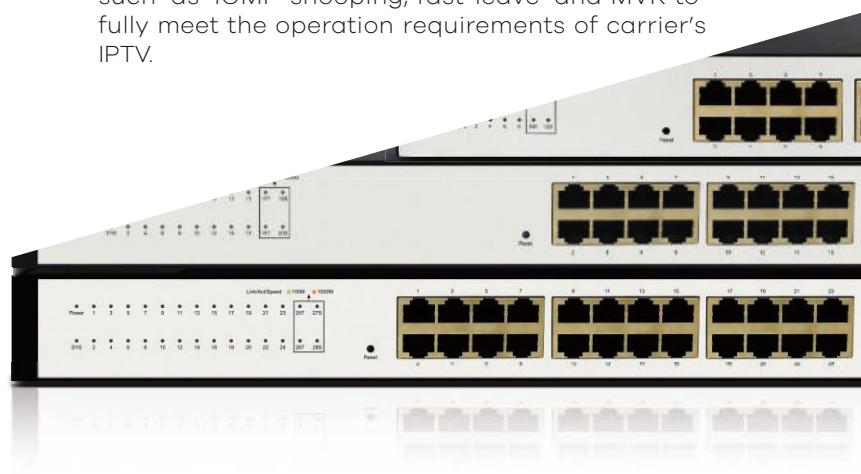
### Carrier-Level Ethernet Access Switch

S2200-B 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;

S2200-B Series has powerful ACL functions to access and control L2-L7 data based on physical port, providing carriers flexible and various policy control methods;

S2200-B Series supports In-Service Software Upgrade (ISSU) to ensure the unremitting data forwarding during system upgrade;

S2200-B 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

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## Comprehensive Ipv6 Solutions

S2200-B Series supports the IPv6 protocol suite, IPv6 neighbor discovery, ICMPv6 and Path MTU discovery.

S2200-B Series supports Ping, Traceroute, Telnet, SSH and ACL on the basis of IPv6, meeting IPv6 networks' equipment management requirements and service control requirements;

## Enhanced QoS

S2200-B Series supports priority retagging and complicated flow classification based on VLAN, MAC, source address, destination address, IP or priority, better streamlining carrier's services.

S2200-B Series provides flexible bandwidth control policies, supporting port-/flow-based flow limit, ensuring the line speed forwarding of each port.

S2200-B 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+.

S2200-B Series supports storm/multicast/unicast limit, ensuring the normal running of equipment in harsh network conditions.

S2200-B Series supports perfect ring detection mechanism, ensuring the long-term stable running of network.

S2200-B Series supports port isolation within the same VLAN, DHCP-Snooping, and IP + MAC + Port binding.

## Easy Management and Maintenance

S2200-B Series supports many management modes such as the CLI, Telnet, SSH, SSL and SNMP.

S2200-B Series supports the WEB management mode, which is easy and efficient for installing and debugging the device.

S2200-B Series supports FTP/TFTP and SFTP.

S2200-B Series supports ISSU (In-Service Software Upgrade).

S2200-B 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.

S2200-B supports Zero Touch Provisioning(ZTP) function to minimize manual operator intervention and helps reduce customers' initial deployment costs.

# Model Lists

## S2212-B



- 8 100M TX ports
- 2 GE TX ports
- 2 100/1000M SFP ports

## S2220-B



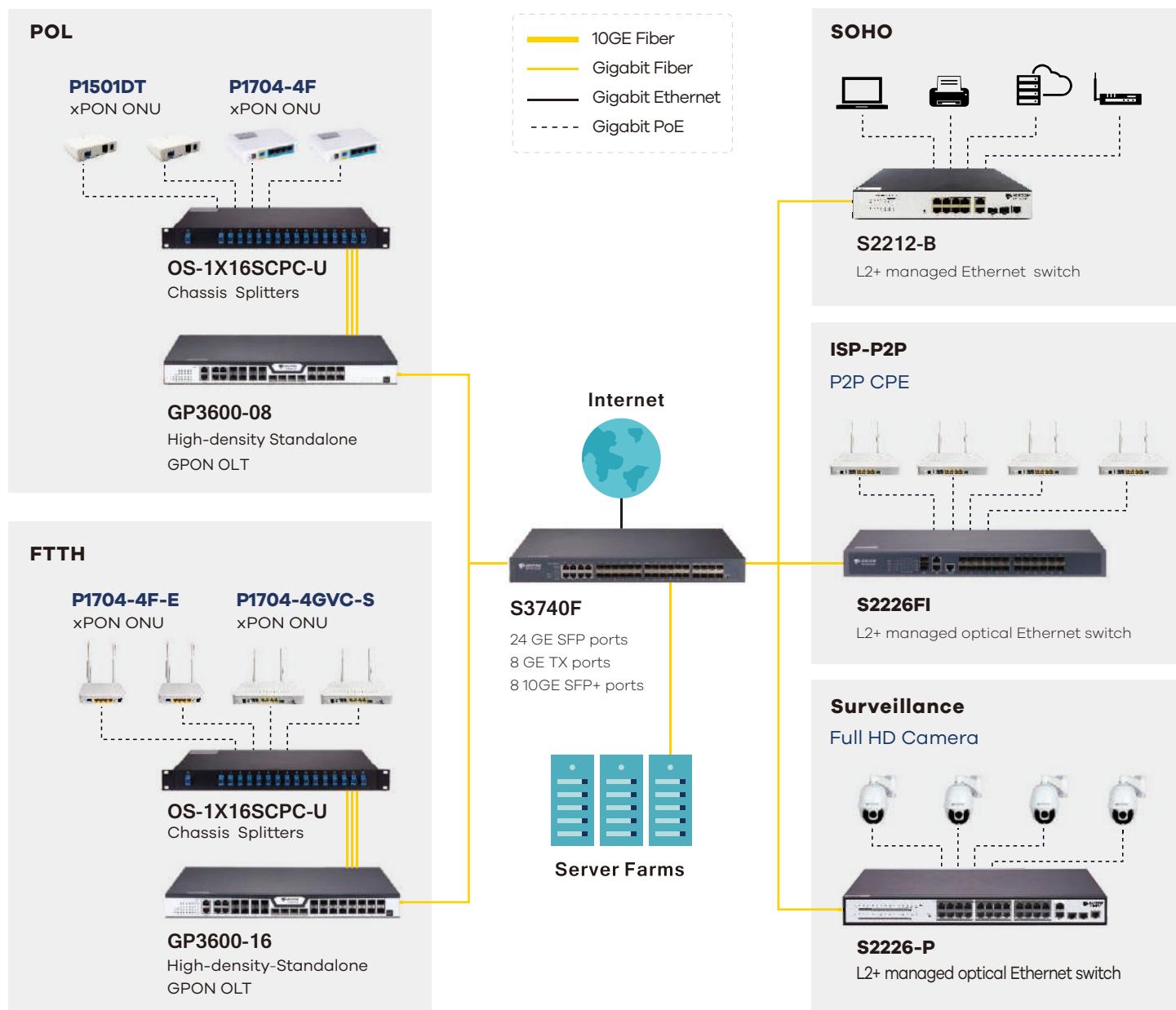
- 16 100M TX ports
- 2 GE TX ports
- 2 100/1000M SFP ports

## S2228-B



- 24 100M TX ports
- 2 GE TX ports
- 2 100/1000M SFP ports

# Application Diagram



# Product Specifications

Item	S2212-B	S2220-B	S2228-B	
Interface	8 100M TX ports, 2 GE TX ports, 2 100/1000M SFP ports	16 100M TX ports, 2 GE TX ports, 2 100/1000M SFP ports	24 100M TX ports, 2 GE TX ports, 2 100/1000M SFP ports	
Console	1 RJ45 port, 1 RST button	1 RJ45 port, 1 RST button	1 RJ45 port, 1 RST button	
Backplane	9.6 Gbps	11.2 Gbps	12.8 Gbps	
Forwarding rate	7.2Mpps	8.4Mpps	9.6Mpps	
Chassis	Dimensions (WxDxH)(mm) Weight(KG)(empty)	280x180x44 1.15	440x210x44 1.35	440x210x44 2.05
Package	Dimensions (WxDxH)(mm) Weight(KG)	346x289x90 2.15	555x292x80 2.35	555x295x80 3.05
Power consumption	no-load full-load	< 7W 12W	< 8W 14W	< 10W 16W
Power supply	AC: 100V-240V, 50Hz±10%	18W	18W	18W
Total output BTU (1000BTU/H=293W)	40.96	47.78	54.61	
Fan number	/	/	/	
Noise@25°C(dBA)	0	0	0	
MTBF(H)	>50,000	>50,000	>50,000	
Forwarding mode	Store-forward	Store-forward	Store-forward	
Flash (MB)	16	16	16	
DRAM (MB)	128	128	128	
MAC	8K	8K	8K	
Buffer size(MB)	4.1	4.1	4.1	
Jumbo frame	9K	9K	9K	
Total SVI	10	10	10	
Lightning Protection	4KV	4KV	4KV	

## 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

### IP

- Static route
- RIP, OSPF
- 512 routing table
- IP v4/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 BTacacs+
- 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
<b>S2200-B series Ethernet switches</b>	
S2212-B	Ethernet switch with 8 100M TX ports and 4 GE uplink ports (1 Console port, 8 100M TX ports, 2 1000M TX ports, 2 100/1000M SFP ports, an AC220V power supply, fanless, 1U, 11-inch rack -mounted installation)
S2220-B	Ethernet switch with 16 100M TX ports and 4 GE uplink ports (1 Console port, 16 100M TX ports, 2 1000M TX ports, 2 100/1000M SFP ports, an AC220V power supply, fanless, 1U, 19-inch rack -mounted installation)
S2228-B	Ethernet switch with 24 100M TX ports and 4 GE uplink ports (1 Console port, 24 100M TX ports, 2 1000M TX ports, 2 100/1000M SFP ports, an AC220V power supply, fanless, 1U, 19-inch rack -mounted installation)
<b>Optical Modules</b>	
<b>100M Optical Modules</b>	
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 core bidirectional (20Km, TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-20-BIDI	100M SFP single-mode, single core bidirectional (20Km, TX1550/RX1310, LC, DDM)
FSFP-LX-SM1310-40-BIDI	100M SFP single-mode, single core bidirectional (40Km, TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-40-BIDI	100M SFP single-mode, single core bidirectional (40Km, TX1550/RX1310, LC, DDM)
FSFP-LX-SM1310-80-BIDI	100M SFP single-mode, single core bidirectional (80Km, TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-80-BIDI	100M SFP single-mode, single core bidirectional (80Km, TX1550/RX1310, LC, DDM)
<b>GE Optical Modules</b>	
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	GE SFP single-mode, single core bidirectional (10Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-10-BIDI	GE SFP single-mode, single core bidirectional (10Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-20-BIDI	GE SFP single-mode, single core bidirectional (20Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-20-BIDI	GE SFP single-mode, single core bidirectional (20Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-40-BIDI	GE SFP single-mode, single core bidirectional (40Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-40-BIDI	GE SFP single-mode, single core bidirectional (40Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1490-80-BIDI	GE SFP single-mode, single core bidirectional (80Km, TX1490/RX1550, LC, DDM)
GSFP-LX-SM1550-80-BIDI	GE SFP single-mode, single core bidirectional (80Km, TX1550/RX1490, LC, DDM)
GSFP-LX-SM1490-120	GE SFP single-mode, single core bidirectional (120Km, TX1490/RX1550, LC, DDM)
GSFP-LX-SM1550-120	GE SFP single-mode, single core bidirectional (120Km, TX1550/RX1490, LC, DDM)

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