BDCOM
Professional Network Technology

- CCTV System
- Wireless
- xPON
- Switches
- Industrial Products
- Routers

BDCOM S2500-B Series
Full-gigabit Ethernet Switches

BDCOM S2500-B Series

Product Overview

BDCOM S2500 Series is a new-generation smart 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.

BDCOM S2500 Series has 3 models: S2510-B, S2518-B and S2528-B.

S2510-B

S2528-B

Product Characteristics

➢ **Carrier-class Ethernet Access Switches**
● S2500 Series supports the telecom-level Ethernet-ring protection protocol with a protection shift time of less than 50ms, STP/RSTP/MSTP, backup of active and standby uplinks, and LACP link aggregation to cater to the requirements of high reliability of carriers;
● S2500 Series has powerful ACL functions to access and control L2-L7 data, providing carriers flexible and various policy control methods;

- S2500 Series supports ISSU (In-Service Software Upgrade), which guarantees the user data non-stop forwarding when the system is upgrading;
- S2500 Series supports various L2 multicast function, including user fast-leave mechanism and cross VLAN multicast replication function.

➢ **Rich QoS Policies**

- S2500 Series supports complex traffic classification based on VLAN, MAC, source address, destination addresses, IP protocols and priorities. It also supports priority remark. These functions provide an effective way for users to optimize their businesses.

- S2500 Series provides with flexible bandwidth control policies, supporting port-/flow-based flow limit and ensuring the line speed forwarding of each port to make sure the high quality of video, audio and data services

- S2500 Series also supports multiple queue grooming algorithms such as SP, WRR or SP+WRR.

➢ **Comprehensive IPv6 Solutions**

- S2500 Series supports the IPv6 protocol suite, IPv6 neighbor discovery and ICMPv6.
- S2500 Series supports IPv6 based Ping, Traceroute, Telnet and SSH, meeting the need of IPv6 network equipment management and service control.

➢ **Comprehensive Security Mechanisms**

- S2500 Series adopts advanced hardware architecture design, realizing the hierarchical scheduling and protection of the packet. It provides multiple security measures to defend against attacks from SYN Flood, UDP Flood, broadcast storm and mass flow of DOS or TCP. It also supports command line authority control based on user levels.

- Comprehensive Security Certification: S2500 Series complies with IEEE 802.1x, Radius and BDTacacs+.
- S2500 Series supports the suppression of broadcast, multicast and unknown unicast packet, ensuring the equipment can operate normally in harsh network conditions.

- S2500 Series has the perfect loop detection mechanism.
- S2500 Series supports the port isolation in a same VLAN, DHCP-Snooping and IP+MAC+ port binding.

➢ **Convenient Management and Maintenance**

● S2500 Series supports multiple management styles such as Console, Telnet and SSH.

● S2500 Series supports WEB based management. The management is more simple and effective.

● S2500 Series supports upload and download of TFTP files.

● S2500 Series supports ISSU (In-Service Software Upgrade).

● S2500 Series supports SNMP. By cooperating with BDCOM's smart NMS, functions including the equipment auto-discovery, the topology management, the equipment configuration management, the performance data analysis, and the fault management can be realized. In this way, the network management is simplified and the user get a new product experience.

Product Specifications

Item	S2510-B	S2518-B	S2528-B
Backplane	64Gbps		
Forwarding rate	15Mpps	27Mpps	42Mpps
Ports	8 10/100M/1000M Base-T ports + 2 gigabit SFP ports	16 10/100M/1000M Base-T ports + 2 gigabit SFP ports	24 10/100M/1000M Base-T ports + 4 gigabit SFP ports
Dimensions mm (W×D×H)	280×180×44	440.5×230×44.5	440.5×230×44.5
Consumption	12W	12W	24W
Power supply	AC: 100V-240V, 50Hz±10%		
Environment	Operating temperature/humidity: 0℃-50℃, 10%-90% non-condensing Storage temperature/ humidity: -20℃-70℃; 5%-95% non-condensing		
MAC	Static configuration and dynamically learning of MAC address Check and delete MAC address Configuring of MAC address aging time Limit on MAC address learning number		

	MAC address filtering function
VLAN	4K VLAN entries
	GVRP
	1:1 and N:1 VLAN Mapping
	QinQ
	Private VLAN
STP	802.1D (STP), 802.1W (RSTP), 802.1S (MSTP)
	BPDU protection, root protection and ring protection
Multicast	IGMP v1/v2/v3
	IGMP Snooping
	IGMP Fast Leave
	Multicast group policy and multicast number limit
	Multicast traffic cross VLAN duplication
IPv4	Static routing
IPv6	ICMPv6, DHCPv6 and IPv6 Telnet
	IPv6 Neighbor Discovery
	MLD v1/v2
	MLD Snooping
QoS	Traffic classification of each field of L2/L3/L4 protocol headers
	CAR traffic control
	802.1P/DSCP priority remark
	Multiple queuing algorithms such as SP, WRR or SP+WRR Tail-Drop, WRED
	Traffic supervision and traffic shaping
Security features	Identification and filtering of L2/L3/L4 based ACL
	Defend against DDoS attack, SYN Flood attack of TCP or UDP Flood attack
	Suppression of broadcast, multicast and unknown unicast packet
	Port isolation
	Port security, IP+MAC+port binding
	DHCP Snooping, DHCP Option 82
	IEEE 802.1x authentication
	Radius and BDTacacs+ authentication
	Command line authority control based on user levels
Reliability	Static/LACP link aggregation

	EAPS and ERPS
	ISSU
Management and Maintenance	Console, Telnet, SSH 2.0
	WEB based management style
	SNMP v1/v2/v3
	Upload and download of TFTP files
	RMON

Ordering Information

Item	Description
S2500 Series	
S2510-B	Ethernet switch with 8 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 8 10/100M/1000M Base-T TX ports, 4 gigabit SFP ports; a standard AC220V power supply; the cooling fan, 1U, 19-inch rack-mounted installation)
S2518-B	Ethernet switch with 16 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 16 10/100M/1000M Base-T TX ports, 2 gigabit SFP ports; a standard AC220V power supply; the cooling fan, 1U, 19-inch rack-mounted installation)
S2528-B	Ethernet switch with 24 gigabit Base-T ports and 4 gigabit SFP ports (1 Console port, 24 10/100M/1000M Base-T ports, 4 gigabit SFP ports; a standard AC220V power supply; the cooling fan, 1U, 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)
Gigabit Optical Modules	
GSFP-TX-B	Gigabit SFP-to-RJ45 module
GSFP-SX-D	Gigabit SFP multi-mode (500m, 850nm, LC, DDM)
GSFP-LX-10-D	Gigabit SFP single mode (10Km, 1310nm, LC, DDM)
GSFP-LX-20-D	Gigabit SFP single mode (20Km, 1310nm, LC, DDM)
GSFP-LX-40-D	Gigabit SFP single mode (40Km, 1310nm, LC, DDM)
GSFP-ZX-80-D	Gigabit SFP single mode (80Km, 1550nm, LC, DDM)
GSFP-LX-SM1310-10-BIDI GSFP-LX-SM1550-10-BIDI	Gigabit SFP single mode, single-core bidirectional (10Km, TX1310/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (10Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-20-BIDI GSFP-LX-SM1550-20-BIDI	Gigabit SFP single mode, single-core bidirectional (20Km, TX1310/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (20Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-40-BIDI GSFP-LX-SM1550-40-BIDI-1310	Gigabit SFP single mode, single-core bidirectional (40Km, TX1310/RX1550, LC, DDM)

	Gigabit SFP single mode, single-core bidirectional (40Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1490-80-BIDI GSFP-LX-SM1550-80-BIDI	Gigabit SFP single mode, single-core bidirectional (80Km, TX1490/RX1550, LC, DDM) Gigabit SFP single mode, single-core bidirectional (80Km, TX1550/RX1490, LC, DDM)
GSFP-LX-SM1490-120 GSFP-LX-SM1550-120	Gigabit SFP single mode, single core bidirectional (120Km, TX1490/RX1550, LC, DDM) Gigabit SFP single mode, single core bidirectional (120Km, TX1550/RX1490, LC, DDM)

For More Information

For more information about the **BDCOM S2500-B 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