

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 Baud'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
Switching	56Gbps		
capacity			
Forwarding	15Mpps	27Mpps	42Mpps
rate	1011160	2	12111660
Ports	8 10/100M/1000M	16 10/100M/1000M	24 10/100M/1000M
	Base-T ports + 2	Base-T ports + 2 gigabit	Base-T ports + 4 gigabit
	gigabit SFP ports	SFP ports	SFP ports
Dimensions	000 400 44	440 522044 5	440.5×230×44.5
mm (W×D×H)	280×180×44	440.5×230×44.5	
Consumption	12W	12W	24W
Power supply	AC: 100V-240V, 50Hz±10%		
Environment	Operating temperature/humidity: 0°C-50°C, 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
	4K VLAN entries
	GVRP
\/I	
VLAN	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  IGMP v1/v2/v3
NA. III	IGMP Snooping
Multicast	IGMP Fast Leave
	Multicast group policy and multicast number limit
	Multicast traffic cross VLAN duplication
IPv4	Static routing
	ICMPv6, DHCPv6 and IPv6 Telnet
IPv6	IPv6 Neighbor Discovery
	MLD v1/v2
	MLD Snooping
	Traffic classification of each field of L2/L3/L4 protocol headers
	CAR traffic control
QoS	802.1P/DSCP priority remark
	Multiple queuing algorithms such as SP, WRR or SP+WRR
	Tail-Drop, WRED
	Traffic supervision and traffic shaping
	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
Security	Port isolation
features	Port security, IP+MAC+port binding
Todado	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	
	Console, Telnet, SSH 2.0	
Management	WEB based management style	
and	SNMP v1/v2/v3	
Maintenance	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 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 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 Mini usb 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)	



	400M OFF single goods single constitutional (OOKs)
	100M SFP single-mode, single-core bidirectional (20Km,
FSFP-LX-SM1310-20-BIDI	TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-20-BIDI	100M SFP single-mode, single-core bidirectional (20Km,
	TX1550/RX1310, LC, DDM)
	100M SFP single-mode, single-core bidirectional (40Km,
FSFP-LX-SM1310-40-BIDI	TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-40-BIDI	100M SFP single-mode, single-core bidirectional(40Km,
	TX1550/RX1310, LC, DDM)
	100M SFP single-mode, single-core bidirectional (80Km,
FSFP-LX-SM1310-80-BIDI	TX1310/RX1550, LC, DDM)
FSFP-LX-SM1550-80-BIDI	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)
	Gigabit SFP single mode, single-core bidirectional (10Km,
GSFP-LX-SM1310-10-BIDI	TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-10-BIDI	Gigabit SFP single mode, single-core bidirectional (10Km,
	TX1550/RX1310, LC, DDM)
	Gigabit SFP single mode, single-core bidirectional (20Km,
GSFP-LX-SM1310-20-BIDI	TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-20-BIDI	Gigabit SFP single mode, single-core bidirectional (20Km,
	TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-40-BIDI	Gigabit SFP single mode, single-core bidirectional (40Km,
GSFP-LX-SM1550-40-BIDI-1310	TX1310/RX1550, LC, DDM)



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

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