



BDCOM

BDCOM S2500 Series Full-gigabit Ethernet Switches

BDCOM S2500 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 Non-POE switches have 8 models: S2510, S2512, S2524D, S2528C, S2528GX, S2548GX and S2556. BDCOM S2500 Series POE switches have multiple models: S2512POE, S2518POE, S2526POE, S2528POE and S2528P.



S2510



S2512



S2524D



S2528C



S2528GX



S2548GX



S2556

- S2510: 8 10/100/1000 Base-T ports and 2 1000 Base-X ports;
- S2512: 8 10/100/1000 Base-T ports and 4 1000Base-X ports;
- S2524D: 24 10/100/1000 Base-T ports and 4 combo 1000Base-X ports;
- S2528C: 24 10/100/1000 Base-T ports and 4 1000 Base-X ports;
- S2528GX: 24 100/1000 Base-X ports and 4 gigabit combo ports (10/100/1000Base-T ports or 1000Base-X ports);
- S2548GX: 48 1000Base-X ports and 4 10/100/1000Base-T combo ports;
- S2556: 48 10/100/1000Base-T ports and 8 1000Base-X ports.



S2510P



S2512POE

**S2518POE****S2528P/S2528P-800**

- S2510P: 8 10/100/1000Base-T ports and 2 1000Base-X ports;
- S2518POE: 16 10/100/1000Base-T ports and 2 1000Base-X ports;
- S2528P/S2528P-800: 24 10/100/1000Base-T ports and 4 1000Base-X ports.

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.

➤ **Complete POE Power Supply Function**

- S2500 Series supports 802.3AF/AT standard, built-in high-power power supply and 24-port POE+ power supply;
- S2500 Series supports POE non-stop powering when it is in hot-restart;
- S2500 Series supports power port priority when the power is not efficient.
- S2500 Series supports the POE port with up to 2KV thunder-proof.

➤ **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

S2500 Non-POE Series

Item	S2510	S2512	S2524D	S2528C	S2528GX	S2548GX	S2556
Switching capacity	64Gbps	64Gbps	64Gbps	64Gbps	64Gbps	128Gbps	256Gbps
Forwarding rate	15Mpps	18Mpps	36Mpps	42Mpps	42Mpps	72Mpps	131Mpps
Dimensions mm (W×D×H)	240×150×42	280×180×4	442×208×4	440×180×4	440×180×4	442×315×4	442×315×4
Power consumption	<15W	<15W	<45W	<45W	<45W	<70W	<80W

S2500 POE Series

Item	S2510P	S2518POE	S2528P/S2528P-800
Switching capacity	20Gbps	64Gbps	64Gbps
Forwarding rate	15Mpps	27Mpps	42Mpps
Dimensions mm (W×D×H)	340×200×44	442×315×44	440×280×44
Power consumption	<30W	<45W	<45W
POE/POE+	Support	Support	Support
Power supply	AC: 100V-240V, 50Hz±10% DC: -36V~-72V (The POE switch here doesn't support DC power supply)		
Environment	Operating temperature/humidity: 0°C-50°C, 10%-90% non-condensing Storage temperature/ humidity: -20°C-70°C; 5%-95% non-condensing		
MAC switching function	Static configuration and dynamically learning of MAC address Check and delete MAC address Configuring of MAC address aging time		

	<p>Limit on MAC address learning number</p> <p>MAC address filtering function</p>
VLAN	<p>4K VLAN entries</p> <p>GVRP</p> <p>1:1 and N:1 VLAN Mapping</p> <p>QinQ</p> <p>Private VLAN</p>
STP	<p>802.1D (STP), 802.1W (RSTP), 802.1S (MSTP)</p> <p>BPDU protection, root protection and ring protection</p>
Multicast	<p>IGMP v1/v2/v3</p> <p>IGMP Snooping</p> <p>IGMP Fast Leave</p> <p>Multicast group policy and multicast number limit</p> <p>Multicast traffic cross VLAN duplication</p>
IPv4	<p>Static routing (only limit to S2528C, S2528GX and S2528P)</p>
IPv6	<p>ICMPv6, DHCPv6 and IPv6 Telnet</p> <p>IPv6 Neighbor Discovery</p> <p>MLD v1/v2</p> <p>MLD Snooping</p>
QoS	<p>Traffic classification of each field of L2/L3/L4 protocol headers</p> <p>CAR traffic control</p> <p>802.1P/DSCP priority remark</p> <p>Multiple queuing algorithms such as SP, WRR or SP+WRR</p> <p>Tail-Drop, WRED</p> <p>Traffic supervision and traffic shaping</p>
Security features	<p>Identification and filtering of L2/L3/L4 based ACL</p> <p>Defend against DDoS attack, SYN Flood attack of TCP or UDP Flood attack</p> <p>Suppression of broadcast, multicast and unknown unicast packet</p> <p>Port isolation</p> <p>Port security, IP+MAC+port binding</p> <p>DHCP Snooping, DHCP Option 82</p> <p>IEEE 802.1x authentication</p> <p>Radius and BDTacacs+ authentication</p>

	Command line authority control based on user levels
Reliability	Static/LACP link aggregation EAPS and ERPS(single ring) 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 Non-POE Switches	
S2510	Ethernet switch with 8 gigabit Base-T ports and 2 gigabit optical ports (1 console port, 8 gigabit Base-T ports, 2 gigabit SFP ports; the standard AC220V power supply, fanless, 1U, desktop or wall-mounted installation)
S2512	Ethernet switch with 8 gigabit Base-T ports and 4 gigabit optical ports (1 console port, 8 gigabit Base-T ports, 4 gigabit SFP ports; the standard AC220V power supply, fanless, 1U, desktop or wall-mounted installation)
S2524D	Ethernet switch with 24 gigabit Base-T ports and 4 combo gigabit SFP/Base-T ports (1 console port, 24 gigabit Base-T ports, 4 gigabit combo SFP/Base-T ports; the standard AC220V power supply; fanless, 1U, standard 19-inch rack-mounted installation)
S2528C	Ethernet switch with 24 gigabit Base-T ports and 4 gigabit optical ports (1 console port, 24 gigabit Base-T ports, 4 gigabit SFP ports; the standard AC220V power supply; fanless, 1U, standard 19-inch

	rack-mounted installation)
S2528GX	Ethernet switch with 24 gigabit optical ports and 4 gigabit combo ports (1 console port, 24 gigabit SFP ports, 4 gigabit SFP/Base-T combo ports; the standard AC220V power supply, the cooling fan, 1U, 19-inch rack-mounted installation)
S2548GX	Ethernet switch with 48 gigabit optical ports and 4 gigabit combo ports (1 console port, 48 gigabit SFP ports, 4 gigabit SFP/Base-T combo ports; the standard AC220V power supply, additional RPS power supply interface; the cooling fan, 1U, standard 19-inch rack-mounted installation)
S2556	Ethernet switch with 48 gigabit Base-T ports and 8 gigabit optical ports (1 Mini USB console port, 48 gigabit Base-T ports, 8 gigabit SFP ports; the standard AC220V power supply, the cooling fan, 1U, standard 19-inch rack-mounted installation)

S2500 Series POE Switches

S2510P	Ethernet POE switch with 8 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 8 gigabit POE ports, 2 gigabit SFP ports; the standard AC220V power supply, 150W POE power, the cooling fan, 1U, desk-top installation)
S2510P-DC	Ethernet POE switch with 8 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 8 gigabit POE ports, 2 gigabit SFP ports; the standard DC36-72V power supply, 150W POE power, the cooling fan, 1U, desk-top installation)
S2518POE	Ethernet POE switch with 16 gigabit Base-T ports and 2 gigabit SFP ports (1 console port, 16 gigabit POE ports, 2 gigabit SFP ports; the standard AC220V power supply, 400W POE power; the cooling fan, 1U, standard 19-inch rack-mounted installation)
S2528P	Ethernet POE switch with 24 gigabit Base-T ports and 4 gigabit

	SFP ports (1 console port, 24 gigabit POE ports, 4 gigabit SFP ports; the standard AC220V power supply, 400W POE power; the cooling fan, 1U, 19-inch rack-mounted installation)
S2528P-800	Ethernet POE switch with 24 gigabit Base-T ports and 4 gigabit SFP ports (1 console port, 24 gigabit POE ports, 4 gigabit SFP ports; the standard AC220V power supply, 800W POE power; 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-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)

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	Gigabit SFP single mode, single-core bidirectional (10Km, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-10-BIDI	Gigabit SFP single mode, single-core bidirectional (10Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1310-20-BIDI	Gigabit SFP single mode, single-core bidirectional (20Km, 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, TX1310/RX1550, LC, DDM)
GSFP-LX-SM1550-40-BIDI-1310	Gigabit SFP single mode, single-core bidirectional (40Km, TX1550/RX1310, LC, DDM)
GSFP-LX-SM1490-80-BIDI	Gigabit SFP single mode, single-core bidirectional (80Km, TX1490/RX1550, LC, DDM)
GSFP-LX-SM1550-80-BIDI	Gigabit SFP single mode, single-core bidirectional (80Km, TX1550/RX1490, LC, DDM)
GSFP-LX-SM1490-120	Gigabit SFP single mode, single core bidirectional (120Km, 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 [BDCOM S2500 Series](#), please contact your local BDCOM account representative.

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