

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.





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 capacity | 56Gbps | | |
| Forwarding rate | 15Mpps | 27Mpps | 42Mpps |
| 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 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° C-50 $^{\circ}$ C, 10%-90% non-condensing | | |
| | Storage temperature/ humidity: -20°C-70°C; 5%-95% non-condensing | | |
| | Static configuration and dynamically learning of MAC address | | |
| | Check and delete MAC address | | |
| MAC | 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 | |
| | IGMP v1/v2/v3 | |
| | 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 | |
| IFVO | 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 | |
| 000 | 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 | |
| features | 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 | Console, Telnet, SSH 2.0 | |
| and | WEB based management style | |



| Maintenance | SNMP v1/v2/v3 | |
|-------------|-----------------------------------|--|
| | Upload and download of TFTP files | |
| | RMON | |
| | RIMON | |

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) | |
| 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) | |



| | 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) |
| | Gigabit SFP single mode, single-core bidirectional (40Km, |
| GSFP-LX-SM1310-40-BIDI | 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, |



| GSFP-LX-SM1550-80-BIDI | TX1490/RX1550, LC, DDM) |
|------------------------|--|
| | 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 BDCOM S2500-B Series, please contact your local BDCOM account representative.

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