

---

# BDCOM S2500 Multiservice Gigabit Ethernet Switch Series

## Overview

BDCOM S2500 switches, which are gigabit switches and framed on the new-generation Broadcom chip, are developed by BDCOM for working in high-performance network groups and enterprise's networks. They have 8/16/24/28/48/52 10/100/1000 Base-TX RJ-45 auto-adaptable ports or gigabit optical ports and 4 optional TX/SFP gigabit ports, and support 10/100/1000M connections, so networks can be flexibly configured.



S2524B



S2548GX

BDCOM S2500 switch series includes the following models: S2508B, S2516B, S2524B, S2528, S2524GX, S2548GX and S2552.

BDCOM S2500 switches can access all Ethernet or fast-Ethernet devices, so this series is a very compatible one. S2500C can not only provide workgroups or enterprises those connections with high bandwidth, high performance and multi-media, but meanwhile enhance the capacity of the server group so that users can save the whole network resources rapidly. The application of it can settle the transmission bottleneck resulting from insufficient network bandwidth and rapidly increasing users, but the cost to apply it is low and the management is relatively simple.

## Properties

### Excellent performance

- 192Gbps backboard bandwidth, uncongested design and full wire-speed forwarding
- Gigabit optical-fiber transmission with up to 80Km distance and directly connecting the MAN backbone network

### High security and reliability

- Providing multiple user authentication modes such as 802.1x authentication
- Powerful ACL and hardware supporting L2 to L7 data filtration
- **Port-MAC-IP bind**
- **Special ARP invasion detection to effectively stop ARP cheat**

### Flexible and various management

- The straight-through cable and the intercrossed cable can be automatically identified.
- Adopting the cluster technology; supporting device cascading; managing uniquely through a unique IP address; saving address resources
- Multiple management modes such as Console port, Telnet, Web and SNMP are supported.
- Supporting multiple general network management protocols like Broad Director, HP Open View and

**Powerful flow and broadcast management**

- The detection of IGMP packets is supported.
- The flow control can be realized in full-duplex mode or half-duplex mode.
- The rate limitation in a minimum step of 64K is supported on the Ethernet interface.
- IP multicast and QoS are supported.

**Technology Indexes**

	<b>S2508B</b>	<b>S2516B/2524B</b>	<b>S2528</b>	<b>S2524/ S2548GX</b>	<b>S2552</b>
<b>Standard configuration</b>	8 10/100/1000M Base-T Ethernet ports 2 optional TX/SFP ports, which are multiplexed with the first 2 ports One Console port	16 /24 10/100/1000M Base-T Ethernet ports 4 optional TX/SFP ports, which are multiplexed with the first 4 ports One Console port	24 10/100/1000M Base-T Ethernet ports 4 1000M GSFP optical ports One Console port	24/48 1000M SFP 4 10/100/1000M (TX/SFP) 4 One Console port	48 10/100/1000M ports 4 1000M SFP optical ports One Console port
<b>Backplane bandwidth</b>	24Gbps	48/64Gbps	72Gbps	64/128Gbps	192Gbps
<b>Forwarding rate</b>	Full wire-speed filtering and forwarding				
<b>Switching mode</b>	Store forwarding				
<b>Address table</b>	8K				
<b>Queue buffer</b>	64MB				
<b>Flow Control</b>	Backpressure is adopted for half-duplex, while IEEE802.3x is adopted for full-duplex.				
<b>Broadcast control</b>	The broadcast storm is constrained. When the threshold value for controlling the broadcast storm is reached, the broadcast packets are stopped from being forwarded.				
<b>Multicast control</b>	Automatically monitoring IGMP packets				
<b>Service quality</b>	Two transmission queues on each port are mapped to eight priority values of 802.1p.				
<b>Interface binding</b>	Eight interfaces can be bound in a group through dynamic LACP or static aggregation, and 12 groups can be supported simultaneously.				
<b>Cascading</b>	Cluster				
<b>Bridging</b>	IEEE 802.1D-1998 spanning tree, path backup, IEEE 802.1w (RSTP)				
<b>VLAN</b>	Supporting port-based VLAN, 802.1Q-labelled VLAN and dynamic VLAN configuration through GVRP				
<b>Number of VLANs</b>	4K VLANs				
<b>QinQ</b>	Support				
<b>QoS</b>	Supporting QoS				

	Supporting ACL, flow classification on L2 to L4, and class division on S2548GX, S2528 or S2552
<b>Network management</b>	Supporting CLI, Telnet, SNMP and RMON Supporting multiple general network management software
<b>Network security</b>	IEEE 802.1x, port-based access control, RADIUS, TACACS DHCP snooping on the hardware (supported by S2528, S2548GX or S2552) Supporting DAI and static/dynamic ARP prevention on the hardware (supported by S2528, S2548GX and S2552) Supporting IP ACL, MAC ACL and Vlan ACL on the hardware (supported by S2528, S2548GX and S2552)
<b>Specifications</b>	S2508B: 340mm×200mm×44mm S2516B/S2524B/S2524GX/S2548GX: 442mm×315mm×44mm S2528: 442mm×225mm×44mm S2552: 442mm×374mm×44mm
<b>Power characteristics</b>	AC current: 110-240V (auto-adaptable), 47-63Hz, 1A/230V, or 60V broadcast & TV power
<b>Indicator</b>	Power indicator, system indicator, connection/data forwarding indicator, 10/100M indicator
<b>Temperature and humidity</b>	Working temperature: 0-50℃ Storage temperature: -40-70℃ Humidity: 0-90% no condensation

## Typical Application

Along with the development of network, bandwidth upgrade is now an unstoppable trend. The fashion of gigabit access and “gigabit to desktop” is realized in more and more application sites, and it can be forecasted that the L2 gigabit switches will play a more and more important role in network development in the future. BDCOM S2500 switches not only meet the requirements of network upgrade, but also make it easy for network administrators to manage and control the network through their functions like ARP filtration and ACL.