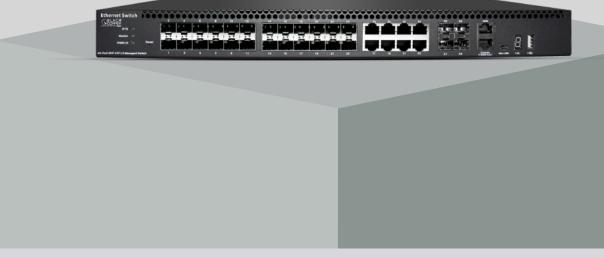# BLACK COPPER
Upgrades network

BC-8GS-24SFP-F410G

24-Port Gigabit SFP Layer 3 Managed Switch with 4 10Gbe Ports

- 24 Gigabit SFP Slots
- 8 Combo 10/100/1000 Mbps RJ45 Ports
- 4 10G SFP+ Slots
- 1 10/100/1000Mbps Management RJ45 Port
- 1 RJ45 Console Port
- Support the management of Apollo cloud

Overview

The BC-8GS-24SFP-F410G Layer 3 Managed Switch is designed for Small and Medium Enterprises (SMEs), Large Enterprises and Internet Service Providers (ISPs). They offer high performance, flexibility, fault tolerance and advanced software features for maximum return on investment. The BC-8GS-24SFP-F410G switch features Gigabit Ethernet RJ45 and SFP ports, 10 GbE SFP+ ports, advanced security features and advanced Quality of Service (QoS) and can be used as a core, distribution or access layer switch with high port Density, switch stacking and ease of management, ideal for a variety of commercial networking applications.

Features

Port 6KV lightning protection, dual power redundant design

- All ports support 6KV lightning protection。
- Dual power redundant design,support seamless switchover in case of failure without manual intervention.

Advanced hardware architecture design, powerful processing capability

- Using high-performance switching chips, it can meet the application requirements of various complex scenarios and greatly improve the network data processing rate.

Powerful business processing capabilities

- Support 802.1Q VLAN, MAC VLAN, IP VLAN, users can flexibly divide VLAN as needed.
- Support QoS, 8 port queues, support port priority, 802.1P priority, DSCP priority, support SP, WRR, SP+WRR, WFQ priority scheduling algorithm.
- Support ACL, support L2 (Layer 2) ~ L4 (Layer 4) packet filtering function, provide flexible and secure access control policy.
- Support IGMP v1/v2/v3 Snooping, MLD v1/v2 Snooping, to meet the requirements of multi-terminal HD video surveillance or video conference.
- Supports the fast leave mechanism and querier of Layer 2 multicast, supports Layer 2 IPv4 static multicast and Layer 2 IPv6 static multicast.
- Support RIP dynamic routing protocol, solve the routing problem after the small and medium-sized network is divided into subnets, and simplify the network configuration.
- Support static routing protocol, and manually configure routing entries to realize communication between different network segments.
- Support proxy ARP, so that hosts in different physical networks on the same network segment can communicate normally.

Perfect security mechanism

- Completed security authentication mechanism: It supports IEEE 802.1x, Radius, Tacacs+, etc.
- The loop detection mechanism can ensure the stable operation of the network for a long time.
- High security features such as port isolation in VLAN, DHCP-Snooping and IP+MAC+port binding, etc., to further ensure user data security.
- Support multi protections like ARP, IP source and DoS.
- Support declining user access by the port numbers, IP address, and MAC address.

Diverse reliability protection

- Support STP (IEEE 802.1d), RSTP (IEEE 802.1w) and MSTP (IEEE 802.1s) protocols to eliminate Layer 2 loops and implement link backup.
- Support loop protection, root bridge protection, TC protection, BPDU protection, and BPDU filtering.
- Support 50ms switching of optical ports.

Flexible and convenient management and maintenance

- Supports various management methods such as Console, Telnet, and SSH.
- Support WEB network management (HTTP, HTTPS, SSL V3), which is simpler and more efficient, and is convenient for users to install and debug.
- Supports file upload and download management in TFTP mode.
- Support SNMP V1/V2/V3 to facilitate device management through the network management platform.
- Support one-stop management and maintenance of Fengrunda Apollo cloud platform, which can realize all-round remote operation and maintenance such as automatic device discovery, network topology management, and remote configuration management of devices.

Specifications

Hardware Specifications	
Network Interface	• 8 10/100/1000Mbps RJ45 Port (Combo) • 4 10G SFP+ Port • 24 Gigabit SFP Port • 1 RJ45 Console Port，1 10/100Mbps RJ45 managed Port • 1 USB 2.0 interface,1 Mini-usb Console Port
Network protocol standard	• IEEE 802.3、IEEE 802.3i、IEEE 802.3u、IEEE 802.3ab、IEEE 802.3z、IEEE 802.3ad、IEEE 802.3x、IEEE 802.1p、IEEE 802.1q、IEEE 802.1d、IEEE 802.1s、IEEE 802.1w
Performance Specifications	• Backplane bandwidth：128Gbps • Packet forwarding rate：95.2Mpps • MAC address table：16K • Port cache：12Mb • Forwarding Mode: Store and Forward
LED indicator	• 28 1000M Link/Act indicators • 24 10/100M网口 Link/Act indicators • 1 Power indicator • 1 SYS indicator
Power support	• Input power：AC 100-240V/50-60Hz • Dual power redundant input
Physical Specifications	• Dimensions (LxWxH)：440mm×320mm×44mm
Environmental Specifications	• Working temperature：0℃~40℃ • Storage temperature：-40℃~70℃ •Working humidity: 10%~90% RH non-condensing • Storage humidity: 5%~90% RH non-condensing
Safety regulations	• CE/ROHS/FCC