SMCGS803
EZ Switch™ 10/100/1000 Mbps
8-Port Gigabit Ethernet Switch

Product Overview
The EZ Switch 10/100/1000 SMCGS803 switch provides the new loopback detection features that improves the network environment and reduces network maintenance costs. The SMCGS803 switch uses the internal power design, with up to 10 times the speed of 100Mbps networks, the switch reduces transfer times of large data files and boosts bandwidth-intensive applications, thereby significantly enhancing overall network performance. Jumbo frame support enables more efficient data transfers with data packets up to 9K Bytes in size. The switch is easy to install and an ideal solution for network migration with its 10/100/1000 Mbps Auto MDI/MDIX ports. Not only are ports triple-speed, all ports can be connected to either a workstation or another switch, without the need for crossover cables. Supporting non-blocking wire-speed throughput, the switch is built to handle the growing performance needs of bandwidth-hungry applications in today’s networks.

Key Features and Benefits

Loopback Detection
When a loop occurs, the switch indicates the port that has the loop issue with the port LED.

Support for Jumbo Packets
Support for Jumbo packets of up to 9K Bytes in size.

Auto MDI/MDI-X on each port
Support for Auto MDI/MDI-X means that no crossover cables are required. Straight-through cables can be used for all connections.

EEE Support
The switch supports the IEEE 802.3az Energy-Efficient Ethernet (EEE) feature to save power consumption.

Fan-less Design
The switch supports a fan-less design, providing a silent operating environment.

IEEE 802.1p QoS
When the switch receives a frame tagged with an 802.1p priority, it places it into the appropriate priority output queue. Priority queuing is needed in implementations where time-sensitive data, such as voice and video, are streamed across the network.

Application Diagram

Loopback Detection
The SMCGS803 provides a loopback detection function. When a loop occurs, the Loop LED turns on and the port LED indicates the port with the loop issue.

Prevention Solution
When a loop occurs, the port LED flashes twice per second to indicate the port with the loop issue.
Features

Physical Ports
8 10/100/1000 Mbps auto-negotiating RJ-45 ports

Network Interface
10BASE-T (IEEE 802.3)
100BASE-TX (IEEE 802.3u)
1000BASE-T (IEEE 802.3ab)

Feature
Jumbo Frames 9K Bytes
IEEE 802.1p QoS
IEEE 802.3x Flow Control
Auto MDI/MDI-X
IEEE 802.3az
Loopback Detection

LED
Power
Link/Activity
Loop

Switch Database
8K MAC address entries

Buffer Memory
128K Bytes

Switching Capacity
SMCGS803: 16 Gbps

Power Requirement
100-240V~50/60Hz

Frame Filter Rate
10BASE-T: 14881 pps/port
100BASE-TX: 148810 pps/port
1000BASE-T: 1488100 pps/port

Frame Forwarding Rate
10BASE-T: 14881 pps/port
100BASE-TX: 148810 pps/port
1000BASE-T: 1488100 pps/port

Throughput
SMCGS803: 11.9 Gbps

Dimensions
190 x 120 x 35 mm (7.5 x 4.72 x 1.38 in)

Weight
SMCGS803: 0.69 kg (1.52 lbs)

Electromagnetic Compatibility
CCC
CE Mark
FCC Class A
BSMI

Immunity
EN55024
IEC61000-4/2/3/4/5/6/8/11

Emissions
FCC Class A, EN55022/EN61000-3-2/3

Safety
LVD (EN60950)

Temperature
Operating Temperature: 0°C~40°C (32°F~104°F)
Operating Humidity: 10%~90% non-condensing
Storage Temperature: -40°C~70°C (-40°F~158°F)
Storage Humidity: 10%~90% non-condensing

Warranty
Please check www.smc.com for the warranty terms in your country/region.

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