SMCGS1610/SMCGS2410
EZ Switch™ 10/100/1000 Mbps
16/24-Port Gigabit Ethernet Plus Switch

Push to Smart:
1. DHCP Prevention
2. Loopback Detection/Prevention
3. IGMP Snooping v1/v2

Enable   Disable
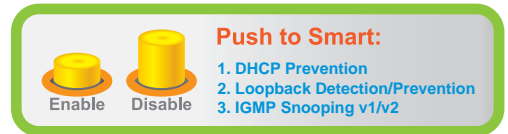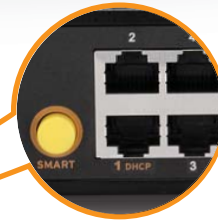
Product Overview

The EZ Switch 10/100/1000 SMCGS1610 and SMCGS2410 are the first available unmanaged switches that can be transformed into smart switches with the use of a single button. DHCP prevention combined with loopback detection and prevention, improves the network environment and reduces network maintenance costs. The switches also provide DoS attack protection, minimizing virus attacks and increasing network uptime.

These switches provide Gigabit Ethernet connectivity from the network backbone all the way to the edge and to individual desktops. With up to 10 times the speed of 100 Mbps networks, these switches reduce transfer times of large data files and boost 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 switches are easy to install and an ideal solution for network migration with their 10/100/1000 Mbps Auto MDI/MDIX ports. Not only are ports triple-speed, all ports can be either connected to a workstation or another switch, without the need for crossover cables. Supporting non-blocking wire-speed throughput, the switches are built to handle the growing performance needs of bandwidth-hungry applications in today's networks.

Key Features and Benefits

Smart Button
The SMCGS1610/SMCGS2410 are the first available unmanaged switches that can be transformed into smart switches with the use of a single button.

DHCP Prevention
DHCP Prevention protects the company's valid DHCP server from any rogue DHCP servers in the network. When you push the Smart button to enable the DHCP Prevention feature, only the DHCP Port can connect to the valid DHCP server.

Loopback Detection and Prevention
When a loop occurs, the switch blocks the loop port automatically, protecting the switch and indicating the port that has the loop issue with the port LED.

DoS Attack Protection
The switch detects some DoS attacks and provides protection.

IGMP Snooping v1/v2
The switches support IGMP snooping v1/v2 to enable smooth video streaming.

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

Fan-less Design
The switches support a fan-less design, providing a silent operating environment.

IEEE 802.1p QoS
When the switches receive a frame tagged with an 802.1p priority, they place 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 SMCGS2410 can provide a loopback detection function. When a loop occurs, the Loop LED turns on and the port LED indicates the port with the loop issue.

Switch   Switch
Loop Detect
PC / Notebook   PC / Notebook

Prevention Solution
When a loop occurs, the loop port is blocked automatically , securing the company network without any troubleshooting effort.

Normal   Loop   Loop Detect

Normal

Loop LED

Loop

Port LED
Flash:2 times/sec
1~24

Loop Detected
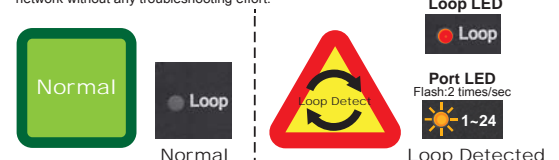
Features

Physical Ports
SMCGS1610
16 10/100/1000 Mbps auto-negotiating RJ-45 ports
SMCGS2410
24 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/MDIX
IEEE 802.3az
Loopback Detection/ Prevention
DHCP Prevention
IGMP Snooping v1/v2
DoS Attack Protection

LED
Power
Link/Activity
Loop

Switch Database
16K MAC address entries

Buffer Memory
Internal Memory: 64 K
Flash: 2M

Switching Capacity
SMCGS1610: 32 Gbps
SMCGS2410: 48 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
SMCGS1610: 23.8 Mpps
SMCGS2410: 35.7 Mpps

Dimensions
280 x 180 x 44 mm (11.0 x 7.1 x 1.7 in)

Weight
SMCGS1610: 1.54 kg (3.40 lbs)
SMCGS2410: 1.66 kg (3.65 lbs)

Electromagnetic Compatibility
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.

Contact

Edge-Core Networks Corporation

Worldwide Corporate and Sales Headquarters

No. 1 Creation Road III,
Hsinchu Science Park,
30077, Taiwan, R.O.C.
Tel: +886 3 5638888 Fax: +886 3 6686111

Singapore

15 Enggor Street
#10-04, Realty Centre
Singapore 079716
Tel: 65-63387667 Fax: 65-63387767

Check www.smc-asia.com or www.smc.com for your local country contact information

Connect Your World …

Switches | Wireless | Broadband | Carrier Ethernet | Network Management

www.smc.com
www.smc-asia.com