



**Enterprise Switch** 

SMC8824M / SMC8848M

TigerStack II 1000 Stackable 24/48 10/100/1000 Managed Layer 2 Switch with 2 x 10G Uplink slots



# **OVERVIEW**

SMC Networks' TigerStack II 10/100/1000 Switches are the newest in a series of "Next Generation" high performance stackable switches that deliver high scalability, wire-speed Gigabit performance, high availability, 10 Gigabit Ethernet uplinks, and redundant power options. These switches are the first to include both IPv4 and IPv6 Management options enabling future proofed flexibility and maintainability.

The TigerStack II 10/100/1000 SMC8824M/SMC8848M stacks up to 8 units in a stack, providing up to 384 Gigabit ports. A stack can be created with either of the 24 or 48 port switches, providing unprecedented flexibility. It provides up to 48 built-in copper Gigabit ports, including (4) Combo SFP ports supporting either copper links or SFP adapters for easy, flexible connection to fiber-based Gigabit media and a switching capacity of up to 176Gbps. The 2 10G module slots on the rear of the switch provide support for XFP 10G connections. These provide high bandwidth connections to the core of a network and are in additon to the 2 stacking connectors giving high capacity connections to the other units in the stack.

The SMC8824M/SMC8848M switches feature a variety of network management options for both IPv4 and IPv6: console CLI, telnet, web, SNMPv1/v2/v3, RMON, TFTP, Port Mirroring, BootP, and DHCP. It also supports a variety of advanced traffic management options including: 802.1x, Bandwidth Control, Broadcast Storm Control, and support for IGMP Snooping v1/v2.

The SMC8824M/SMC8848M supports Layer 3 and Layer 2 networks by providing RIP v1,v2 and static routing to allow extra flexibility for your ethernet network and a comprehensive L2/L4 feature set. The L2/L4 feature set includes QoS/Cos, VLAN, and security features. It supports 8 priority queues for 802.1p/ToS/DiffServ, with classification and marking based on MAC SA/DA, IP SA/DA, and/or TCP/UDP. Security features include: 802.1x (Port Authentication), port security, and Access Control Lists (ACL) based on MAC address, IP address, and/or TCP/UDP port numbers. It also provides extensive support for GVRP, 802.1q, and a flexible VLAN implementation including port, tagged and protocol based VLANs. The SMC8824M/SMC8848M is the latest example of SMC's continued commitment to our channel partners and customers to be the industry leader in cost-effective, reliable, high performance, feature-rich switches.

FEATURES	BENEFITS
High-port density and migration protection in a small footprint	Supports 24 or 48*10/100/1000Mbps including 2 stacking ports and 2 optional 10G uplink slots in a 1RU chassis
Advanced Management Support	Introduces IPv6 Management support to enhance the standard IPv4 management interfaces.
Layer 3 support via RIPv1/2 and Static routing	Allows Layer 3 edge networks to be implemented without the need for a hardware upgrade
QoS	Support eight levels of priority, with weighted fair queuing and L2/3/4 IP precedenceensures smooth transmission of mission critical data
VLAN with GVRP and 802.1v	Support VLANs based on frame tags or ports, plus support for automatic GVRP LAN registration spanning tree per VLANpro- vides maximum security and bandwidth efficiency
IGMP Snooping	Only allows IP Multicast traffic transmission to the registered members, resulting bandwidth savingsreduce IP multicast traffic and increase LAN performance
MultiLink Trunking with LACP	Can group links between switches to provide higher bandwidth of up to 16Gbps
Comprehensive security support	Currently supports RADIUS, IEEE802.1x, SSH, SSL,TACACS+, ACL
Redundant Power Supply	Provides backup power in case of power failure



# **TECHNICAL SPECIFICATIONS**

# SMC8824M / SMC8848M



IMMUNITY

SAFETY

WARRANTY

• EN 61000-4-2/3/4/5/6/8/11

SUPPORTED MODULES AND CABLES

SLIDE-IN TRANSCEIVERS FOR 10G MODULE

• 10G SR XFP Transcevier, 300m, Multimode

• 10G LR XFP Transceiver, 10km, Single mode

SLIDE-IN TRANSCEIVERS FOR COMBO PORTS

• 1G SX SFP Transciever, 550M, Multimode

• 1G LX SFP Transciever, 10Km, Singlemode

• 1G LH SFP Transciever, 70Km Singlemode

SMC NETWORKS AUSTRALIA

ACACIA RIDGE QLD 4110 Australia

www.smc-australia.com.au

1/14 Wellington Street,

1300 725 323

• 10G ER XFP Transcevier, 40Km

TÜV/GS (EN60950-1)

• CB (IEC60950-1)

· Limited lifetime

STACKING CABLES

 SMC8700S-30 30CM STACKING CABLE

• SMC8700S-130

SMCXFPMOD MODULE

SMC10GXFP-SR

SMC10GXFP-LR

SMC10GXFP-ER

SMC1GSFP-SX

SMC1GSFP-LX

fiber

fiber

fiber

Contact

SMC1GSFP-ZX

fiber

fiber

1 Port XFP module

• 130CM STACKING CABLE

• CSA/CUS (CSA 22.2. NO 60950-1 & UL60950-1)

## PORTS

- 24/48 10/100/1000BASE-T ports
- 4 Combo SFP ports
- 2 Stacking ports • 2 10G Module slots

## NETWORK INTERFACE

- 10/100/1000 BASE-T ports
- XFP Transceiver slots supporting SR, LR and ER XFP
- Multimode fiber cable; 62.5/125 or
- 50/125 microns
- Singlemode fiber cable: 9/125 micron

## SWITCHING FABRIC

- SMC8824M
- 128Gbps
- 95Mpps • SMC8848M
- 176Gbps
- 131Mpps

## **BUFFER ARCHITECTURE**

- SMC8824M
- 0.75Mbytes
- SMC8848M 1.5Mbvtes

# SWITCHING DATABASE

8K MAC address entries

### LED

- System: Stack Master, Stack Link, Module,
- Power, Diag, RPS
- Port: Link/Activity

## WEIGHT

- SMC8824M • 5.7Kg (12.6lbs)
- SMC8848M
- 6.1Kg (13.4lbs)

## DIMENSIONS

• 44.0 x 41.5 x 4.4 cm (17.4 x 16.4 x 1.8 in.)

## TEMPERATURE

- Operating: 0 to 50 °C (32 to 122 °F)
- Storage: -40 to 70 °C (-40 to 158 °F)

## HUMIDITY

• Operating: 5% to 95% (non-condensing)

# AC INPUT

• 100 to 240 V, 50-60 Hz, 2A

### POWER SUPPLY

- Internal, auto-ranging transformer: 100 to 240 VAC, 50 to 60 Hz
- External, supports connection for redundant power supply

## POWER CONSUMPTION

- SMC8824M
- 66 Watts
- SMC8848M • 105 Watts

MAXIMUM CURRENT • 1.6 A @ 100 VAC

www.smc.com

• 0.6 A @ 230 VAC

# MTBF

8 Years

## SWITCH FEATURES

- RIPv1/2
- Static routing LACP 802.3ad
- VLANs (up to 256)
- GVRP
- 802.1v (Protocol based VLANs)
- Private VLAN support
- Spanning Tree (802.1D, 802.1w, 802.1s)
- Broadcast Storm Control
- Flow Control
- IGMP Snooping (v1,v2)
- IGMP Querying
- Jumbo Frame (up to 9K)
- ACL's
- . 802.1x
- RADIUS TACACS+
- Static Port Security • DNS

## QUALITY OF SERVICE

- Supports 8 levels of priority with flexible classification and prioritization
- Per port bandwidth management

## **DIAGNOSTIC FEATURES**

- Port Mirroring
- Remote Ping Event/Error Log
- SMTP

## MANAGEMENT FEATURES

- In-Band Features IPv6 and IPv4 support
- Telnet and SSH
- HTTP and HTTPS
- SNMP (v1,v2c,v3)
- Out-of-Band Management
- RS-232 Console port
- Software upgrade
- TFTP or XModem
- Dual Firmware Images
- Configuration Download/Upload

### RMON SUPPORT

• Groups 1,2,3, 9 (Statistics, History, Alarm, Event)

## STANDARDS

protocol

COMPLIANCE

IEC8802.3

FCC Class A

VCCLClass A

**CE MARK** EMISSIONS

ISO

- IEEE 802.3-2002 Ethernet, Fast Ethernet, Gigabit Ethernet
- IEEE 802.3ae 10 Gigabit Ethernet
- IEEE 802.1D Spanning Tree Protocol

IEEE 802.10 Virtual LAN

Industry Canada Class A

 EN55022 (CISPR 22) Class A • EN 61000-3-2/3

C-Tick - AS/NZS 3548 (1995) Class A

IEEE 802.1p Priority tags

IEEE 802.1w Rapid Spanning Tree Protocol • IEEE 802.1s Multiple Spanning Tree Protocol

• IEEE 802.3ad Link aggregation control

IEEE 802.1v Protocol Based Vlans