



Managed Switch

SMC8648T

TigerSwitch[™] 48-port 10/100/1000 Managed Switch with 4 associated mini-GBIC ports



OVERVIEW

Improved- The Power of 96Gbps in 1RU box!

The TigerSwitch 10/100/1000 was the first in the market to bring you a 48-port gigabit switch in a small 1RU footprint. Now enhanced with the latest technologies, the SMC8648T's 48 auto-MDIX 10/100/1000 ports provide a feature-rich platform for bandwidth-starved networks. The SMC8648T delivers wire-speed switching performance in a robust 88Gbps switch fabric, with advanced features such as QoS priority queuing with IP precedence in Layer2/Layer 4, VLANs with .1Q, 1s, and private, and of course, IGMP for today's multimedia applications. Also included are features such as RADIUS client enhancement for 802.1x, TACACS+, SSH, SSL, Access Control List (ACL) to address today's concerns regarding security.

FEATURES	BENEFITS
High-Port density in a 1RU footprint	Support up to 48 auto-MDIX 10/100/1000 ports with 4 associat- ed mini-GBIC slots for optional gigabit fiber plug-in
VLANs with GVRP support	Layer 2 isolation between ports within the same private VLAN plus support for automatic GVRP LAN registration for maximum security and bandwidth efficiency
IGMPv1/v2	IGMP allows multicast traffic transmission to registered users only
LACP for link aggregation	Port trunking group links between switches, increases bandwidth for dedicated link
RADIUS remote authentication	Features such as 802.1x, TACACS+authentication client, SSH for secure Telnet, HTTPS and SSL address today's concerns regarding security
Jumbo frames 9K support	
Full wire-speed non-blocking switching performance at backplane	



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TECHNICAL SPECIFICATIONS SMC8648T

PORTS

48 10/100/1000BASE-T ports
4 associated mini-GIBC slots for media expansion

NETWORK MEDIA

- •10BASE-T : RJ-45 UTP Cat. 3, 4, 5
- •100BASE-TX: RJ-45 UTP Cat. 5
- •1000BASE-T: RJ-45 UTP Cat. 5

LEDs

- System (power, RPU, diagnostics)
- Port: Link, Activity

DIMENSIONS

- 17.37 x 13.9 x 1.7 in
- 44.1 x 41 x 4.3 cm (BTH)

WEIGHT

9.46 lbs / 4.3Kg

HUMIDITY

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

TEMPERATURE

• Operating : 32 - 122° F / 0 - 50° C • Storage: -40 - 158°F / -40 - 70° C

WARRANTY

Limited Lifetime

AGGREGATED BANDWIDTH

• 96Gbps

BUFFER ARCHITECTURE

2Mb per system

SWITCHING DATABASE

• 16K MAC address entries

AC INUT

•100 to 240V, 50-60Hz

POWER SUPPLY

Internal, auto-ranging transformer : 90 TO 260 VAC, 47 to 63 Hz
Redundant DC input

POWER CONSUMPTION

• 70W max

HEAT DISSIPATION

• 239BTU/hr

MAXIMUM CURRENT

- •1.2A @ 110VAC,
- 0.6A @ 240 VAC

MTBF

• 7 years (estimated)

SWITCH FEATURES

- Spanning Tree Protocol
- Forwarding mode with support to IEEE802.1w
- Store-and-forward

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- Flow Control
- Full Duplex: IEEE802.3x
- Half Duplex: back pressure

VLAN Support

- Up to 256 groups; port-based or with 802.1Q VLAN tagging, GVRP for automatic VLAN learning, Private VLANs
- Quality of Service
- Supports eight levels of priority and weighted fair queuing
- DSCP based Class of Service
- TCP/UDP Port Based Class of Service
- Broadcast storm control
- Link Aggregation
- Port Mirroring
- RADIUS Client Enhancement for 802.1x
- TACACS+ authentication client
- HTTPS and SSL
- SSH for secure Telnet Session
- Rate Limiting
- Static Port Security
- SNTP (Simple Network Time Protocol)
- IEEE802.1s independent Spanning

Tree for VLAN groups* MANAGEMENT FEATURES

- In-band Management
- Telnet, SLIP, Web-based HTTP, or SNMP manager
- Out-of-band Management
- RS-232 DB-9 console port
- Software Loading
- TFTP in-band or Xmodem out-of-band • MIB Support
- MIB II (RFC1213), Bridging MIB (RFC1493), Ethernet-Like MIB (RFC1643), RMON MIB (RFC1757), RADIUS authentication client MIB (RFC2618), SMC's private MIB, Port Entity Access MIB (802.1x), UDP MIB
- RMON Support
- Groups 1, 2, 3, 9 (Statistics, History, Alarm, Event)

STANDARD

- •IEEE802.3 Ethernet, IEEE802.3u Fast Ethernet, IEEE802.3z Gigabit
- IEEE802.1D Spanning Tree Protocol and traffic priorities
- IEEE802.1p priority tags
- IEEE802.1Q VLAN
- IEEE802.1ac VLAN tagging
- IEEE802.1ad Link aggregation control protocol
- IEEE802.1w Fast Spanning Tree
- IEEE802.1s Multiple Spanning Tree*
- IEEE802.1v Protocol based VLANs*
- IEEE802.1x authentication

ISO

- IEC8802.3
- SNMP (RFC 1157), RMON (RFC 1757), ARP (RFC826), IEGMP (RCF1157), IGMP (RFC1112), MIB II (RFC1213), Ethernet-like MIB (RFC1643), Bridge MIB (RFC1493), RADIUS (RFC2618), MAU MIB

COMPLIANCES

• CE Mark

- Emissions
- FCC Class A
- Industrial Canada Class A
- EN550222 (CISPR 22) Class A
- VCCI A
- C-Tick AS/NZS 3548 (1995) Class A Immunity

OPTIONALPLUG-IN TRANSCEIVER

• LC connector, 50/125 or 62.5/125

micron multimode fiber cable

LC connector, 9/125 micron

singlemode fiber cable

802.3z Gigabit Ethernet

SMCBSLCX1: Multimode

• SMCBGLLCX1: Single Mode

• SMCBGZLCX1: single Mode

Range: 220m for 62.5/125m, 850nm

Range: 70 to 100Km for 9/125, 1310nm

Range: 550m for 50/125m, 850nm

Range: 10Km for 9/125m, 1310nm

CSA/NTRL (CSA22.2.2950 & UL1950),

• IEC 1000- 4 - 2/3/4/6

EN60950 (TUV/GS)

Safety

MODEL

PORTS

• SMCBGSLCX1

SMCBGLLCX1

SMCBGZLCX1

• (1) 1000BASE-SX

(1) 1000BASE-LX

• (1) 1000BASE-ZX

STANDARDS

TRANSMISSION

OPTIONAL BUDGET

• Full-Duplex

9DB

RANGE

Contact

38 Tesla

North America

Irvine, CA 92618

1-800-SMC-4YOU

Europe/ Africa

Barcelona, Spain

24/7 Technical Support

Fructuos Gelabert 6-8

08970 Sant Joan Despí

country contact information

Check www.smc.com for your local

NETWORK INTERFACE