

# SM6024/2X10G

Layer 3 Gigabit Ethernet Switch

24 SFP ports standalone L3 switch with 4 10/100/1000BASE-T ports + 2 10GbE Modules

SM6024/2X10G is a managed L3 switch that offers 24 SFP ports with 4 10/100/1000BASE-T ports and 2 10GbE Modules.

Delivering significant rack density, SM6024/2X10G gives users the flexibility to maximize server and workstation connectivity in a 1U form factor. SM6024/2X10G support up to two 10 Gigabit Ethernet uplinks for connectivity directly to 10GE routers, enterprise backbones and data centers. Moreover SM6024/2X10G provides advanced Layer 3 routing and multicast protocols to help reduce congestion and manage traffic in the network. SM6024/2X10G supports frequently used LAN multicast, routing and redundancy protocols such as RIPv1/v2, OSPFv2, IGMP, DVMRP and PIM.

## HIGHLIGHTS

- > High Gigabit port Density
- > Advanced Layer 3 Capabilities
- > Advanced QoS
- > Advanced Security



## TECHNICAL SPECIFICATIONS

### PHYSICAL INTERFACES

- > 4 10/100/1000BASE-T auto-sensing Gigabit Ethernet switching ports
- > 24 SFP combo ports for fiber media support
- > 2 10 Gigabit Ethernet uplink ports
- > Auto-negotiation for speed, duplex mode and flow control
- > Auto MDI/MDIX
- > Port mirroring

### PERFORMANCES

- > Switch Fabric Capacity 136 Gb/s
- > Forwarding Rate 95 Mpps
- > Up to 16,000 MAC Addresses
- > 256MB of CPU SDRAM
- > 64MB of Flash Memory

### AVAILABILITY

- > Spanning Tree (IEEE 802.1D) and Rapid Spanning Tree (IEEE 802.1w)
- > Multiple spanning trees (IEEE 802.1s)
- > Supports Virtual Redundant Routing Protocol (VRRP)
- > External redundant power support (sold separately)

### LAYER 3 ROUTING PROTOCOLS

- > Static routes
- > Routing Information Protocol (RIP) v1/v2
- > Open Shortest Path First (OSPFv2)
- > Classless Inter-Domain Routing (CIDR)
- > Virtual Redundant Routing Protocol (VRRP)
- > GARP support
- > Internet Group Management Protocol (IGMP) v2
- > Distance-Vector Multicast Routing Protocol (DVMRP)
- > DHCP server and relay

### LAYER 3 ROUTING PERFORMANCES

- > Up to 128 RIP Routing Interfaces
- > Up to 256 DVMRPRouting interfaces
- > Up to 100 DVMRP multicast routes
- > Up to 40 OSPF Routing Interfaces; up to 5 OSPF Areas;
- > Up to 8 Routing Interfaces per OSPF Area;
- > Up to 512LSA per Area; Up to 50 neighbors per area.
- > Up to 16 PIM-DM interfaces, Up to 3 neighbors per interfaces

### VLAN

- > VLAN support for tagging and port-based as per IEEE 802.1Q
- > Up to 256 VLANs supported
- > GVRP support

### QUALITY OF SERVICE

- > Layer 2 CoS (IEEE 802.1p)
- > Layer 2 CoS Replacement
- > ACL based on layers (L2, L3, L4)
- > Up to 128 ACL per port s can be used for QoS flow identification
- > 8 Priority Queues per Port
- > Weighted-Round-Robin (WRR) and Strict Queue Scheduling
- > Port-based QoS Services Mode

### LAYER 2 MULTICAST

- > Static IP Multicast
- > Dynamic Multicast Support - 256 Multicast groups supported in IGMP Snooping
- > IGMP snooping for IP multicast support
- > IGMP Querier
- > Protocol Independent Multicast (PIM-DM, PIM-SM)

### SECURITY

- > IEEE 802.1x based authentication
- > Switch access password protection
- > User-definable settings for enabling or disabling Web, SSH, Telnet, SSL management access
- > RADIUS remote authentication for switch management access
- > Up to 128 Access Control Lists (ACLs) per port supported;
- > SSLv3 and SSHv2 encryption for switch management traffic

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## OTHER SWITCHING FEATURES

- > Link Aggregation with support for up to 4 aggregated links per switch and up to 8 member ports per aggregated link; LACP support (IEEE 802.3ad)

## MANAGEMENT

- > Web-based management interface
- > Industry-standard CLI accessible via Telnet or Local Serial Port
- > SNMPv1, SNMP v2c supported
- > RMON groups 1,2,3,9 - RFC 1757 supported (history, statistics, alarms and events)
- > TFTP transfers of firmware and configuration files
- > Dual Firmware images on-board
- > Statistics for error monitoring and performance optimization including port summary tables
- > BootP/DHCP IP address management supported
- > Syslog remote logging capabilities
- > Serial Port: RJ45

## CHASSIS

- > 440 x 387 x 43.2 mm (W x D x H)
- > 1U, rack-mounting kit included
- > Approximate weight : 5,6Kg

## HARDWARE

- > 256MB of CPU SDRAM
- > 64MB of Flash Memory

## MIB SUPPORT

- > RFC 1213 MIB II
- > RFC 1286 Bridge MIB
- > RFC 1442 SMIv2 (SNMPv2 MIB)
- > RFC 1493 Definitions of Managed Objects for Bridges
- > RFC 1757 Remote Network Monitoring (RMON) MIB
- > RFC 1907 SNMP v2 MIB
- > RFC 2011 Internet Protocol (IP) MIB using SMIv2
- > RFC 2012 Transmission Control Protocol (TCP) MIB using SMIv2
- > RFC 2013 User Datagram Protocol (UDP) MIB using SMIv2
- > RFC 2233 Interfaces Group using SMIv2
- > RFC 2618 RADIUS MIB
- > RFC 2665 Ethernet-like Interface Types MIB

## ENVIRONMENTAL SPECIFICATIONS

- > Operating Temperature: 0° C to 45° C
- > Storage Temperature: -20° C to 70° C
- > Operating Relative Humidity: 10% to 90% non-condensing
- > Storage Relative Humidity: 10% to 95% non-condensing

## STANDARDS SUPPORTED

- > IEEE 802.1D
- > IEEE 802.1Q
- > IEEE 802.1p
- > IEEE 802.1w
- > IEEE 802.1x
- > IEEE 802.3
- > IEEE 802.3u
- > IEEE 802.3x
- > IEEE 802.3z
- > IEEE 802.3ad
- > IEEE 802.3ae

## POWER

- > 100-240VAC, 50-60Hz

## ELECTROMAGNETIC EMISSION

- > CE mark, commercial
- > FCC Part 15 Class A
- > VCCI Class A
- > EN 55022 (CISPR 22), Class A
- > C-Tick

## ELECTROMAGNETIC IMMUNITY

- > EN55024

## SAFETY

- > UL 1950 (UL/cUL), EN60950 (TUV)

## PACKAGE CONTENTS

- > One switch unit
- > Power cord AC
- > Rackmount kit
- > Rubber feet for desktop installation
- > RS232 management connector adapter for straight cat.5 cable
- > Install guide and user guide in CD
- > Warranty/Support Information card

## RELATED PRODUCTS

- > XFP 10G MM 850nm LC-Receptacle (TSP-10G3A1EER)
- > XFP 10G SM 1310nm LC-Receptacle (TSP-10G3B1QER)
- > SFP 850nm MM Fiber (500m) (LCP-1250A4FSRA),
- > SFP 1310nm SM Fiber (10Km) (LCP-1250B4QSRA),
- > SFP 1310nm SM Fiber (10Km) DDM (LCP-1250B4QDR),
- > SFP 1310nm SM Fiber (40Km) DDM (LCP-1250B4MDR),
- > SFP 1550nm SM Fiber (80Km) DDM (LCP-1250D4RDR),
- > SFP 1550nm SM Fiber (100Km) DDM (LCP-1250D4VD)

### Disclaimer

All statements, technical information and recommendations contained in this documentation have been carefully checked for reliability; however no responsibility is assumed for inaccuracies. The information contained in this documentation is subject to change without notice.