

# 8-port 10/100 Layer 2 Managed Switch

## (8) 10/100 ports

- ▶ 8-port 10/100BASE-TX
- ▶ Non-blocking architecture for full wire speed performance
- ▶ Store and forward architecture
- ▶ IEEE802.1q VLAN tagging
- ▶ IEEE802.1p Class of service
- ▶ Auto MDI-MDIX
- ▶ IGMP/GVRP
- ▶ Port Mirroring
- ▶ 8K Mac Address
- ▶ Telnet/ Web-Based management
- ▶ TFTP Firmware Upgrade

## Features

- ▶ Non-blocking full wire speed performance
- ▶ Store-and-forward architecture
- ▶ 10-inch design for desktop or rackmount
- ▶ Static MAC addresses for secure network
- ▶ Backpressure and flow control
- ▶ Console port on rear panel
- ▶ Conforms to IEEE 802.3, 802.3u, and 802.3x Ethernet Standards
  - ▶ Automatic MDI/MDIX crossover for each 10Base-T/100Base-TX port
- ▶ **Management interface:** Console port, Web Browser Interface
  - ▶ **VLANs:** Supports port based VLAN, up to 128 Groups, and Compatible IEEE 802.1Q VLAN Tagging, VLAN Tagging ID up to 4K
  - ▶ **Port Mirroring:** Supports source-port-based, destination-port-based and source-destination-port mirroring
  - ▶ **Spanning Tree:** Insures only one path between any two nodes on network
  - ▶ **Broadcast Storm Filtering:** Only allows a percentage of port's total bandwidth before broadcast traffic is dropped
  - ▶ **Scheduling schemes:** Packets can be transmitted by different priority schemes; FIFO, WRR, with Enable Delay Bound
  - ▶ **Trunking:** Supports 802.3ad port trunking with flexible load distribution with 800Mbps aggregate bandwidth per trunk group
  - ▶ **VLAN Options:** Supports VLAN tagging, 802.1Q, port based VLANs, overlapping VLANs
  - ▶ **Class of Service:** Supports 802.1p Class of service with 2-level priority queuing
  - ▶ **IGMP, GVRP:** IGMP support to reduce IP multicast traffic for the multimedia applications, support for Group VLAN Resolution Protocol

## MIL-SM800P



## 10/100 copper

10/100 with fiber  
10/100/1000 with fiber

The MIL-SM800P series of layer 2 managed switches provides high performance non-blocking switching. The switch has (8) 10/100 auto-MDI/MDIX ports.

Management features include port based, dynamic and static VLANs, GVRP, VLAN tagging, IGMP Snooping, port mirroring, and port security. Security includes static addressing, filtering and blocking of packets to identified MAC addresses. Two priority queues per port insure minimum delay for voice over IP or multimedia network data. Console port provides local management while Telnet and Web-based management is provided via any network device.

Non-blocking 1.8Gbps architecture assures rapid packet delivery while 8,000 MAC address table provides swift lookup and packet forwarding.

Other ASIC features that enhance performance are included such as 802.1d spanning tree, 802.3x flow control, 802.1ad link aggregation and broadcast storm control.

## Ordering Info

### MIL-SM800P

8-port 10/100 switch

## Specifications

### Standards

- IEEE802.3 10BASE-T 10Mbps, Half/Full Duplex
- IEEE802.3u 100BASE-TX, 10/100Mbps, Half/Full Duplex
- IEEE802.3x Flow control and Back-pressure
- IEEE802.1ad Link Aggregation
- IEEE802.1Q VLAN Tagging
- IEEE802.1p Class of service
- IEEE802.1d Spanning Tree Protocol

MAC Address Table	8K with Auto-learning function
Packet Buffer	2Mbits
Back-plane bandwidth	1.8 Gbps
System throughput	2.67 Mpps packet per second on full-duplex mode
Voltage	100-240VAC
Frequency	50/60HZ
Power Consumption	19W
Operation Temperature	0° to 45°C (32° to 113°F)
Operation Humidity	10% to 90% (non-condensing)
Dimensions	<b>Width:</b> 10.0" [250 mm] <b>Depth:</b> 5.25" [132 mm] <b>Height:</b> 1.75" [37.5 mm]
Weight	2.0 lbs 6 oz.
Emissions & Safety	FCC Class A, CE Mark, UL listed

### Technical Support & Warranty

Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

**(8) 10/100 ports + (1) 100BASE-FX port**

- ▶ 8-port 10/100BASE-TX
- ▶ Non-blocking architecture for full wire speed performance
- ▶ IEEE802.1q VLAN tagging
- ▶ IEEE802.1p Class of service
- ▶ Auto MDI-MDIX
- ▶ IGMP/GVRP
- ▶ Port Mirroring
- ▶ 8K Mac Address
- ▶ Telnet/ Web-Based management
- ▶ TFTP Firmware Upgrade
- ▶ 100Mbps fiber port

**MIL-SM801P(xx)****Features**

- ▶ Non-blocking full wire speed performance
- ▶ Store-and-forward architecture
- ▶ 10-inch design for desktop or rackmount
- ▶ Static MAC addresses for secure network
- ▶ Backpressure and flow control
- ▶ Console port on rear panel
- ▶ Conforms to IEEE 802.3, 802.3u, and 802.3x Ethernet Standards
  - ▶ Automatic MDI/MDIX crossover for each 10Base-T/100Base-TX port
- ▶ **Management interface:** Console port, Web Browser Interface, and SNMP
- ▶ **VLANs:** Supports port based VLAN, up to 128 Groups, and Compatible IEEE 802.1Q VLAN Tagging, VLAN Tagging ID up to 4K
- ▶ **Port Mirroring:** Supports source-port-based, destination-port-based and source-destination-port mirroring
- ▶ **Spanning Tree:** Insures only one path between any two nodes on network
- ▶ **Broadcast Storm Filtering:** Only allows a percentage of port's total bandwidth before broadcast traffic is dropped
- ▶ **Scheduling schemes:** Packets can be transmitted by different priority schemes; FIFO, WRR, with Enable Delay Bound
- ▶ **Trunking:** Supports 802.3ad port trunking with flexible load distribution with 800Mbps aggregate bandwidth per trunk group
- ▶ **VLAN Options:** Supports VLAN tagging, 802.1Q, port based VLANs, overlapping VLANs
- ▶ **Class of Service:** Supports 802.1p Class of service with 2-level priority queuing
- ▶ **IGMP, GVRP:** IGMP support to reduce IP multicast traffic for the multimedia applications, support for Group VLAN Resolution Protocol

The MIL-SM801P series of layer 2 managed switches provides high performance non-blocking switching. The switch has (8) 10/100 auto-MDI/MDIX ports and one fixed 100Mbps fiber port.

Management features include port based, dynamic and static VLANs, GVRP, VLAN tagging, IGMP Snooping, port mirroring, and port security. Security includes static addressing, filtering and blocking of packets to identified MAC addresses. Two priority queues per port insure minimum delay for voice over IP or multimedia network data. Console port provides local management while Telnet and Web-based management is provided via any network device.

Non-blocking 1.8Gbps architecture assures rapid packet delivery while 8,000 MAC address table provides swift lookup and packet forwarding.

Other ASIC features that enhance performance are included such as 802.1d spanning tree, 802.3x flow control, 802.1ad link aggregation and broadcast storm control.

**Ordering Info****MIL-SM801PST**

8-port 10/100 switch plus  
(1) 100BASE-FX MM (ST)  
[2 km/1.2 miles]

**MIL-SM801PSC**

8-port 10/100 switch plus  
(1) 100BASE-FX MM (SC)  
[2 km/1.2 miles]

**MIL-SM801PSC-15**

8-port 10/100 switch plus  
(1) 100BASE-FX MM (SC)  
[15 km/9.5 miles]

**Specifications****Standards**

- IEEE802.3 10BASE-T 10Mbps, Half/Full Duplex
- IEEE802.3u 100BASE-TX, 10/100Mbps, Half/Full Duplex
- IEEE802.3x Flow control and Back-pressure
- IEEE802.1ad Link Aggregation
- IEEE802.1Q VLAN Tagging
- IEEE802.1p Class of service
- IEEE802.1d Spanning Tree Protocol

MAC Address Table	8K with Auto-learning function
Packet Buffer	2Mbits
Back-plane bandwidth	1.8 Gbps
System throughput	2.67 Mpps packet per second on full-duplex mode
Voltage	100-240VAC
Frequency	50/60HZ
Power Consumption	19W
Operation Temperature	0° to 45°C (32° to 113°F)
Operation Humidity	10% to 90% (non-condensing)
Dimensions	<b>Width:</b> 10.0" [250 mm] <b>Depth:</b> 5.25" [132 mm] <b>Height:</b> 1.75" [37.5 mm]
Weight	2.0 lbs 6 oz.
Emissions & Safety	FCC Class A, CE Mark, UL listed

**Technical Support & Warranty**

Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

## (8) 10/100 ports + (1) 100BASE-FX port

- ▶ 8-port 10/100BASE-TX
- ▶ (1) 100BASE-FX fiber uplink port + serial DB-9 port
- ▶ IEEE 802.1x RADIUS Authentication
- ▶ Limit network bandwidth with built-in Bandwidth Provisioning
- ▶ Quality of Service (QoS) based on IEEE802.1p Values and Class of Service (CoS)
- ▶ Supports IGMP Snooping and Query Modes
- ▶ Wired speed non-blocking architecture

## Powerful, Flexible line of Layer 2 Management Switches

- ▶ **Secure your network** with built-in IEEE802.1X Authentication using a centralized RADIUS server.
- ▶ **Deploy multimedia services** (voice, video, audio, telephony) throughout your network with multi-service technologies: IP multicast with IGMP, multiple priority queues, and 256 VLANs.
- ▶ **Manage your network bandwidth** with per-port Bandwidth Provisioning and rate metering. This advanced software feature is ideal for sophisticated measured Ethernet service, including multi-tenant unit (MTU) installations.
- ▶ **Single-Chip Layer 2:** Forwarding rate of 2.6 million packets per second at full wire speed over all network interfaces (full duplex)
- ▶ **Switching Architecture:**
  - 3.6 Gbps switch fabric (per unit) eliminates blocking and latency
  - Embedded RISC processor to handle advanced features
  - Runs cooler and more reliably than older, multi-chip designs
- ▶ **Flexible Deployment Platform:** Factory-configure the switches for your network with 3 available fiber uplink ports. Run single/multimode fiber at 100 Mbps (100BaseFX) up to 60 km.
- ▶ **Advanced Network Security:** Enhance network security through built-in IEEE802.1X EAP Authentication support when using with an existing RADIUS server.
- ▶ **Simplified Network Management:** Choose in-band or out-of-band management tools: Console, telnet, SNMP or web browser
- ▶ **Bandwidth Provisioning:**
  - Manage network bandwidth by shaping traffic according to 8 levels of IEEE 802.1p Quality of Service (QoS)
  - Consolidate different types of network traffic through Class of service (CoS) with 2-level priority queuing ideal for delivering multi-tenant unit (MTU) service over metro and regional Ethernet.
- ▶ **Spanning Tree**
- ▶ **Multi-Services for Multimedia:** Multiple priority queues ensure mission critical applications get the bandwidth and priority they need; 8 transmit queues per 10/100 port. Throughput is maintained—even under heavy traffic conditions. Internet group management protocol (IGMP) optimizes multicast bandwidth by allowing multicast traffic only to registered users; minimizes denial of service attacks from unknown sources.
- ▶ **Virtual LANs:** Logically organize nodes up to 256 groups compliant with IEEE 802.1Q with VLAN Tagging. Overlapping VLANs are ideal for sharing and segmenting traffic and security GARP VLAN Registration Protocol (GVRP) dynamically creates and manages VLANs on 802.1Q trunks. Prunes unnecessary broadcast/unicast traffic and automatically configures compatible GVRP switches.

## MIL-SME801P(xx)



10/100 copper

10/100 with fiber

10/100/1000 with fiber

## Ordering Info

**MIL-SME801PST**  
8-port 10/100 switch with  
(1) 100BASE-FX MM (ST)  
[2 km/1.2 miles]

**MIL-SME801PSC**  
8-port 10/100 switch with  
(1) 100BASE-FX MM (SC)  
[2 km/1.2 miles]

**MIL-SME801PSC-15**  
8-port 10/100 switch with  
(1) 100BASE-FX SM (SC)  
[15 km/9.3 miles]

**MIL-SME801PSC-30**  
8-port 10/100 switch with  
(1) 100BASE-FX SM (SC)  
[30 km/18.6 miles]

**MIL-SME801PSC-60**  
8-port 10/100 switch with  
(1) 100BASE-FX SM (SC)  
[60 km/37.3 miles]

## Management Features

- ▶ **DHCP Client**
- ▶ **Graphical user interface:** HTML browser-based with password protection for local and remote management
- ▶ **Command Line Interface:** Menu-driven telnet or out-of-band via front panel console port
- ▶ **Front Panel:** Graphical representation of unit with real-time network and port status
- ▶ **Port Status:** Display current per-port configuration showing speed, flow-control, bandwidth status and port security status
- ▶ **Port Statistics:** Displays link, type and state of each port including RX/TX/Error for each port and unit. Table view also shows current, peak average and total packets for each port.
- ▶ **Switch Setting:** Configure the switch according to network management requirements including QoS, CoS, broadcast storm filtering mode, and IEEE802.1X protocol mode.
- ▶ **Port Controls:** Configure the state (enabled, disabled), link status (up, down) and mode (speed, duplex); auto negotiation, flow control, priority and bandwidth limits.
- ▶ **Trunking:** Set up IEEE802.3ad port trunking with flexible load distribution, up to 4 ports per trunk group.
- ▶ **Forwarding & Filtering:** Groom IGMP multicast traffic to specific ports with IGMP snooping and IGMP Query mode.
- ▶ **VLAN configuration:** Supports port or protocol based VLANs up to 256 groups. VLAN Tagging ID up to 4K with GVRP for automatic connection to other parts of the network.
- ▶ **Spanning Tree:** Displays root bridge information, designated root, root port, root path cost, hello time, maximum age and forward delay; ports individually configurable for STP parameters (path cost, priority)
- ▶ **Port Mirroring:** Monitor network traffic by Enable/disable Port Mirroring and select the ports for packet analysis.
- ▶ **SNMP Management:** Separate read and write communities, and trap authentication; 4 configurable trap receivers (IP address and community)
- ▶ **802.1X Configuration:** Set parameters for 802.1X EAP Authentication including RADIUS server IP, Shared Key, and Suplicant/Server Timeouts

## Specifications

Connectors	<ul style="list-style-type: none"> <li>• 8-Port Fast Ethernet with Auto-MDI/MDIX (100BaseTX, 10BaseT): RJ-45</li> <li>• (1) 100Mbps fiber uplink: ST or SC connector, single mode or multimode</li> <li>• Console: Serial (RS-232): DB9</li> </ul>
Status Indicators	Separate link-activity, speed (10/100) and duplex (full or half) LEDs for each port; system power
Dimensions	<b>Width:</b> 10.0" [250 mm] <b>Depth:</b> 5.25" [132 mm] <b>Height:</b> 1.75" [37.5 mm]
Weight	2.0 lbs 6 oz.
Operation Temperature	0° to 40°C (32° to 104°F)
Operation Humidity	10% to 90% (non-condensing)
Power	Auto-switching, 110/240 VAC, 50/60 Hz; grounded IEC cord
Standards	<ul style="list-style-type: none"> <li>• IEEE 802.1D spanning tree and bridge filters</li> <li>• IEEE 802.1q Quality of Service (QoS)</li> <li>• IEEE 802.1X EAP Authentication</li> <li>• IEEE 802.1p prioritization (class of service)</li> <li>• IEEE 802.1Q virtual LAN (VLAN) Tagging</li> <li>• IEEE 802.3ad link aggregation</li> <li>• IEEE 802.3x flow control and back pressure</li> <li>• IEEE 802.3z 1000BaseSX/LX over SM/MM fiber [15 km]</li> <li>• IEEE 802.3ab 1000BaseT over Cat. 5 UTP (4 pairs) [100 m]</li> <li>• IEEE 802.3u 100BaseTX over Cat. 5 UTP (2 pairs) [100 m]</li> <li>• IEEE 802.3 10BaseT over Cat. 3 UTP (2 pairs) [100 m]</li> <li>• RFC 1155 SMI</li> <li>• RFC 1215 Trap</li> <li>• RFC 1757 RMON</li> <li>• RFC 1157 SNMP</li> <li>• RFC 1493 Bridge MIB</li> <li>• RFC 1213 MIB II</li> </ul>
Emissions & Safety	FCC Class A, CE Mark, UL listed
Technical Support & Warranty	Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

**(8) 10/100 ports + (1) 1000BASE-SX port**

- ▶ 8-port 10/100BASE-TX
- ▶ Gigabit fiber port
- ▶ Non-blocking architecture
- ▶ IEEE802.1q VLAN tagging
- ▶ IEEE802.1p Class of service
- ▶ Auto MDI-MDIX
- ▶ IGMP/GVRP
- ▶ Port Mirroring
- ▶ 8K Mac Address
- ▶ Telnet/ Web-Based management
- ▶ TFTP Firmware Upgrade

**MIL-SM801G****Features**

- ▶ Non-blocking full wire speed performance
- ▶ Store-and-forward architecture
- ▶ 10-inch design for desktop or rackmount
- ▶ Static MAC addresses for secure network
- ▶ Backpressure and flow control
- ▶ Console port on rear panel
- ▶ Conforms to IEEE 802.3, 802.3u, and 802.3x Ethernet Standards
  - ▶ Automatic MDI/MDIX crossover for each 10Base-T/100Base-TX port
  - ▶ One fixed 1000BASE-SX port
  - ▶ **Management interface:** Console port, Web Browser Interface and SNMP
  - ▶ **VLANs:** Supports port based VLAN, up to 128 Groups, and Compatible IEEE 802.1Q VLAN Tagging, VLAN Tagging ID up to 4K
  - ▶ **Port Mirroring:** Supports source-port-based, destination-port-based and source-destination-port mirroring
  - ▶ **Spanning Tree:** Insures only one path between any two nodes on network
  - ▶ **Broadcast Storm Filtering:** Only allows a percentage of port's total bandwidth before broadcast traffic is dropped
  - ▶ **Scheduling schemes:** Packets can be transmitted by different priority schemes; FIFO, WRR, with Enable Delay Bound
  - ▶ **Trunking:** Supports 802.3ad port trunking with flexible load distribution with 800Mbps aggregate bandwidth per trunk group
  - ▶ **VLAN Options:** Supports VLAN tagging, 802.1Q, port based VLANs, overlapping VLANs
  - ▶ **Class of Service:** Supports 802.1p Class of service with 2-level priority queuing
  - ▶ **IGMP, GVRP:** IGMP support to reduce IP multicast traffic for the multimedia applications, support for Group VLAN Resolution Protocol

The MIL-SM801G series of layer 2 managed switches provides high performance non-blocking switching. The switch has (8) 10/100 auto-MDI/MDIX ports and one fixed 1000Mbps fiber port.

Management features include port based, dynamic and static VLANs, GVRP, VLAN tagging, IGMP Snooping, port mirroring, and port security. Security includes static addressing, filtering and blocking of packets to identified MAC addresses. Two priority queues per port insure minimum delay for voice over IP or multimedia network data. Console port provides local management while Telnet and Web-based management is provided via any network device.

Non-blocking 3.6Gbps architecture assures rapid packet delivery while 8,000 MAC address table provides swift lookup and packet forwarding.

Other ASIC features that enhance performance are included such as 802.1d spanning tree, 802.3x flow control, 802.1ad link aggregation and broadcast storm control.

**Ordering Info****MIL-SM801G**

8-port 10/100 switch plus  
(1) 1000BASE-SX MM (SC)  
[2 km/1.2 miles]

**MIL-SM801GLX-10**

8-port 10/100 switch plus  
(1) 1000BASE-LX SM (SC)  
[10 km/6.2 miles]

**Specifications****Standards**

- IEEE802.3 10BASE-T 10Mbps, Half/Full Duplex
- IEEE802.3u 100BASE-TX, 10/100Mbps, Half/Full Duplex
- IEEE802.3z Gigabit SX/LX 1000Mbps
- IEEE802.3ab Gigabit 1000T 10/100/1000Mbps
- IEEE802.3x Flow control and Back-pressure
- IEEE802.1ad Link Aggregation
- IEEE802.1Q VLAN Tagging
- IEEE802.1p Class of service
- IEEE802.1d Spanning Tree Protocol

MAC Address Table	8K with Auto-learning function
Packet Buffer	2Mbits
Back-plane bandwidth	3.6 Gbps
System throughput	2.67 Mpps packet per second on full-duplex mode
Voltage	100~240VAC
Frequency	50/60HZ
Power Consumption	19W
Operation Temperature	0° to 45°C (32° to 113°F)
Operation Humidity	10% to 90% (non-condensing)
Dimensions	<b>Width:</b> 10.0" [250 mm] <b>Depth:</b> 5.25" [132 mm] <b>Height:</b> 1.75" [37.5 mm]
Weight	2.0 lbs 6 oz.
Emissions & Safety	FCC Class A, CE Mark, UL listed

**Technical Support & Warranty**

Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

## (8) 10/100 ports + (1) 100BASE-X port

- ▶ 8-port 10/100BASE-TX
- ▶ (1) Gigabit fiber uplink port + serial DB-9 port
- ▶ IEEE 802.1x RADIUS Authentication
- ▶ Limit network bandwidth with built-in Bandwidth Provisioning
- ▶ Quality of Service (QoS) based on IEEE802.1p Values and Class of Service (CoS)
- ▶ Supports IGMP Snooping and Query Modes
- ▶ Wired speed non-blocking architecture

## MIL-SME801G(xx)



10/100 copper

10/100 with fiber

10/100/1000 with fiber

## Powerful, Flexible line of Layer 2+ Management Switches

- ▶ **Secure your network** with built-in IEEE802.1X Authentication using a centralized RADIUS server.
- ▶ **Deploy and manage multimedia services** (voice, video, audio, and data) throughout your network with multi-service technologies: IP multicast with IGMP, multiple priority queues, and 256 VLANs.
- ▶ **Manage your network bandwidth** with per-port Bandwidth Provisioning and rate metering. This advanced software feature is ideal for sophisticated measured Ethernet service, including multi-tenant unit (MTU) installations.
- ▶ **Single-Chip Layer 2+ ASIC:** Supports L2+ functionalities including IEEE 802.1x, DHCP Client, Bandwidth Provisioning, and Secure VLAN
- ▶ **Switching Architecture:**
  - 3.6 Gbps switch fabric (per unit) eliminates blocking and latency
  - Embedded RISC processor to handle advanced features
  - Runs cooler and more reliably than older, multi-chip designs
- ▶ **Flexible Deployment Platform:** Factory-configure the switches for your network with 2 available fiber uplink ports. Run single/multimode fiber at 1000 Mbps (100BaseSX/LX) up to 10 km.
- ▶ **Advanced Network Security:** Enhance network security through built-in IEEE802.1X EAP Authentication support when using with an existing RADIUS server.
- ▶ **Simplified Network Management:** Choose in-band or out-of-band management tools: Console, telnet, SNMP or web browser
- ▶ **Bandwidth Provisioning:**
  - Manage network bandwidth by shaping traffic according to 8 levels of IEEE 802.1p Quality of Service (QoS)
  - Consolidate different types of network traffic through Class of service (CoS) with 2-level priority queuing ideal for delivering multi-tenant unit (MTU) service over metro and regional Ethernet.
- ▶ **Spanning Tree**
- ▶ **Multi-Services for Multimedia:** Multiple priority queues ensure mission critical applications get the bandwidth and priority they need. Throughput is maintained—even under heavy traffic conditions. Internet group management protocol (IGMP) optimizes multicast bandwidth by allowing multicast traffic only to registered users; minimizes denial of service attacks from unknown sources.
- ▶ **Virtual LANs:** Logically organize nodes up to 256 groups compliant with IEEE 802.1Q with VLAN Tagging. Overlapping VLANs are ideal for sharing and segmenting traffic and security GARP VLAN Registration Protocol (GVRP) dynamically creates and manages VLANs on 802.1Q trunks. Prunes unnecessary broadcast/unicast traffic and automatically configures compatible GVRP switches.

## Management Features

- ▶ **DHCP Client**
- ▶ **Graphical user interface:** HTML browser-based with password protection for local and remote management
- ▶ **Command Line Interface:** Menu-driven telnet or out-of-band via rear panel console port
- ▶ **Front Panel:** Graphical representation of unit with real-time network and port status
- ▶ **Port Status:** Display current per-port configuration showing speed, flow-control, bandwidth status and port security status
- ▶ **Port Statistics:** Displays link, type and state of each port including RX/TX/Error for each port and unit. Table view also shows current, peak average and total packets for each port.
- ▶ **Switch Setting:** Configure the switch according to network management requirements including QoS, CoS, broadcast storm filtering mode, and IEEE802.1X protocol mode.
- ▶ **Port Controls:** Configure the state (enabled, disabled), link status (up, down) and mode (speed, duplex); auto negotiation, flow control, priority and bandwidth limits.
- ▶ **Trunking:** Set up IEEE802.3ad port trunking with flexible load distribution, up to 4 ports per trunk group.
- ▶ **Forwarding & Filtering:** Groom IGMP multicast traffic to specific ports with IGMP snooping and IGMP Query mode.
- ▶ **VLAN configuration:** Supports port or protocol based VLANs up to 256 groups. VLAN Tagging ID up to 4K with GVRP for automatic connection to other parts of the network.
- ▶ **Spanning Tree:** Displays root bridge information, designated root, root port, root path cost, hello time, maximum age and forward delay; ports individually configurable for STP parameters (path cost, priority)
- ▶ **Port Mirroring:** Monitor network traffic by Enable/disable Port Mirroring and select the ports for packet analysis.
- ▶ **SNMP Management:** Separate read and write communities, and trap authentication; 4 configurable trap receivers (IP address and community)
- ▶ **802.1X Configuration:** Set parameters for 802.1X EAP Authentication including RADIUS server IP, Shared Key, and Suplicant/Server Timeouts

## Ordering Info

### MIL-SME801GSX

8-port 10/100 switch with (1) 100BASE-SX MM (SC)  
[62.5/125µm fiber: 220 m/722 ft.]  
[50/125µm fiber: 550 m/1804 ft.]

### MIL-SME801GLX-10

8-port 10/100 switch with (1) 100BASE-LX SM (SC)  
[10 km/6.2 miles]

## Specifications

Connectors	<ul style="list-style-type: none"> <li>• 8-Port Fast Ethernet with Auto-MDI/MDIX (100BaseTX, 10BaseT): RJ-45</li> <li>• 1-1000Mbps fiber uplink: SC connectors, single mode or multimode</li> <li>• Console: Serial (RS-232): DB9</li> </ul>
Status Indicators	Separate link-activity, speed (10/100) and duplex (full or half) LEDs for each port; system power
Dimensions	<b>Width:</b> 10.0" [250 mm] <b>Depth:</b> 5.25" [132 mm] <b>Height:</b> 1.75" [37.5 mm]
Weight	2.0 lbs 6 oz.
Mounting	Install into a standard 19-inch rack (1 RU height) or placed on a desktop; wall-mount kit and rubber feet included, Optional rack-mount kit available for purchase
Operating Temperature	32° to 104° F (0° to 40° C)
Relative Humidity	10% to 90% non-condensing
Power	Auto-switching, 110/240 VAC, 50/60 Hz; grounded IEC cord
Standards Compliance	<ul style="list-style-type: none"> <li>• IEEE 802.1D spanning tree and bridge filters</li> <li>• IEEE 802.1q Quality of Service (QoS)</li> <li>• IEEE 802.1X EAP Authentication</li> <li>• IEEE 802.1p prioritization (class of service)</li> <li>• IEEE 802.1Q virtual LAN (VLAN) Tagging</li> <li>• IEEE 802.3ad link aggregation</li> <li>• IEEE 802.3x flow control and back pressure</li> <li>• IEEE 802.3z 1000BaseSX/LX over single mode/multi-mode fiber; max distance 32,800 feet (10km)</li> <li>• IEEE 802.3u 100BaseTX over Category 5 UTP (2 pairs); max distance 328 feet (100 meters)</li> <li>• IEEE 802.3 10BaseT over Category 3 UTP (2 pairs); max distance 328 feet (100 meters)</li> <li>• RFC 1155 SMI</li> <li>• RFC 1215 Trap</li> <li>• RFC 1757 RMON</li> <li>• RFC 1157 SNMP</li> <li>• RFC 1493 Bridge MIB</li> <li>• RFC 1213 MIB II</li> </ul>
Emissions & Safety	FCC Class A, CE, UL Listed

### Technical Support and Warranty

Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

**(8) 100BASE-FX ports + (1) GBIC port**

- ▶ High Back-plane Bandwidth 5.6 Gbps
- ▶ IEEE802.1Q VLAN tagging
- ▶ IEEE802.1P Class of service
- ▶ Port, Protocol, Tagged VLANs and GVRP support
- ▶ IGMP Query and IGMP Snooping
- ▶ Port Mirroring /Port Security
- ▶ Web-GUI/ Console/Telnet/SNMP Management
- ▶ TFTP Firmware Upgrade
- ▶ 3.3Volt GBIC Port

**MIL-SM808G(xx)****Features**

- ▶ Non-blocking full wire speed performance
- ▶ Store-and-forward, shared memory architecture
- ▶ Designed for desktop or rackmount
- ▶ Static MAC addresses and MaC filtering for secure networks
- ▶ Backpressure and flow control
- ▶ Serial console port for out of band management
- ▶ Conforms to IEEE 802.1D, 802.3u/z/ab Ethernet Standards
- ▶ **Management interface:** Console port, Web Browser Interface, and SNMPv1
- ▶ **VLANs:** Supports port based or protocol based VLANs, up to 256 Groups, and IEEE 802.1Q VLAN Tagging, VLAN Tagging ID up to 4K
- ▶ **Port Mirroring:** Supports source-port-based, destination-port-based and source-destination-port mirroring of transmit, receive or bi-directional data.
- ▶ **Spanning Tree:** Insures only one path between any two nodes on network
- ▶ **Broadcast Storm Filtering:** Only allows a percentage of port's total bandwidth before broadcast traffic is dropped
- ▶ **Scheduling schemes:** Packets can be transmitted by different priority schemes; FIFO, WRR, with Enable Delay Bound
- ▶ **Trunking:** Supports 802.3ad port trunking with flexible load distribution with 800Mbps aggregate bandwidth per trunk group
- ▶ **VLAN Options:** Supports VLAN tagging, 802.1Q, port based VLANs, overlapping VLANs
- ▶ **Class of Service:** Supports 802.1p Class of service with 2-level priority queuing
- ▶ **IGMP:** Query modes for flat Layer 2 environments needing multicast traffic limiting and IGMP snooping mode to limit traffic to specific ports within VLANs.
- ▶ **GVRP:** Support for Group VLAN Resolution Protocol dynamic join and leave of IEEE 802.1Q VLAN types.

The MIL-SM808G series of layer 2 managed switches provides high performance non-blocking switching. The switch has (8) 100BASE-FX ports and one fixed GBIC port. This is the ideal switch for aggregating remote classroom or workgroup switches.

Management features include port based, dynamic and static VLANs, GVRP, VLAN tagging, IGMP Snooping, port mirroring, and port security. Security includes static addressing, filtering and blocking of packets to identified MAC addresses. Two priority queues with selection of queue management, insure minimum delay for voice over IP or multimedia network data. Console port provides local management while Telnet and Web-based management is provided via any network device.

Non-blocking 5.6Gbps, store and forward, shared memory architecture assures rapid packet delivery while 8,000 MAC address table provides swift lookup and packet forwarding.

Other ASIC features that enhance performance are included such as 802.1d spanning tree, 802.3x flow control, 802.1ad link aggregation and broadcast storm control.

**Ordering Info****MIL-SM808GST**

8-port 100BASE-FX switch multimode (ST) [2 km/1.2 miles] plus (1) GBIC port

**MIL-SM808GSC**

8-port 100BASE-FX switch multimode (SC) [2 km/1.2 miles] plus (1) GBIC port

**MIL-SM808GSC-15**

8-port 100BASE-FX switch single mode (SC) [15 km/9.5 miles] plus (1) GBIC port

**MIL-SM808GSC-60**

8-port 100BASE-FX switch single mode (SC) [60 km/37.3 miles] plus (1) GBIC port

**Optional Accessories**

**GBIC Modules (see page 120)**

**Specifications****Standards**

- IEEE802.3u 100BASE-FX
- IEEE802.3z Gigabit SX/LX 1000Mbps
- IEEE802.3ab Gigabit 100T 10/100/1000Mbps
- IEEE802.3x Flow control and Back-pressure
- IEEE802.1ad Link Aggregation
- IEEE802.1Q VLAN Tagging
- IEEE802.1p Class of service
- IEEE802.1d Spanning Tree Protocol

MAC Address Table 8K with Auto-learning function

Packet Buffer 2Mbits

Back-plane bandwidth 5.6 Gbps

System throughput 148,800 pps for 100Mbps  
1,488,000pps for Gigabit

Voltage 100-240VAC

Frequency 50/60HZ

Power Consumption 17W

Operation Temperature 0° to 45°C (32° to 113°F)

Operation Humidity 10% to 90% (non-condensing)

Dimensions **Width:** 17.6" [250 mm]  
**Depth:** 6.4" [160 mm]  
**Height:** 1.75" [44 mm]

Weight 2.0 lbs. 6 oz.

Emissions & Safety FCC Class A, CE Mark, UL listed

**Technical Support & Warranty**

Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

**(24) 10/100 ports + (1) slot for Dual-Port Modules**

- ▶ Manage through Console Web to a stack of 8 switches
- ▶ Built-in IEEE 802.1X Authentication using a centralized RADIUS server
- ▶ Simplify deployment with built-in DHCP Client protocol
- ▶ Supports Bandwidth Provisioning and rate monitoring

**MIL-SM2401M-STK**

10/100 copper

**10/100 with fiber**

10/100/1000 with fiber

**High Performance Non-blocking Switch with Advanced Features**

- ▶ 24 Auto-sensing 10/100 Auto MDI/MDI-X ports
- ▶ Dual port module bay for 100Mbps or 1000Mbps fiber or copper ports
- ▶ Non-blocking full wire speed performance
- ▶ Store-and-forward architecture
- ▶ 1 U high 19 inch rack mount design
- ▶ IEEE 802.1X support for centralized authentication or static MAC address filters for limiting network access.
- ▶ Backpressure and flow control
- ▶ Console port, Telnet, SNMP or GUI Management
- ▶ Conforms to IEEE 802.3, 802.3u, and 802.3x Standards
- ▶ Automatic MDI/MDIX crossover for each 10/100 port
- ▶ IP Stacking. The IP stacking function allows up to eight MIL-SM2401M-STK switches to be joined as a single unit group. The stackable switches can then be managed through a single IP address.

**Management Features**

- ▶ Port-based, dynamic and static VLANs, GVRP, VLAN tagging
- ▶ IGMP Snooping
- ▶ Port Mirroring
- ▶ Port Security

Security includes static addressing, filtering and blocking of packets to identified MAC addresses and IEEE 802.1X authentication utilizing a centralized RADIUS server. Two priority queues per port insure minimum delay for voice over IP or multimedia network data. The bandwidth rate limiting feature allows for selecting different limits in each direction down to 100 Kbps and in 100 Kbps increments. Console port provides local management while Telnet and Web-base management is provided via any network device. Our private MIB allows for configuring and management from any SNMP Manager.

Non-blocking 8.8Gbps architecture assures rapid packet delivery while 8K MAC address table provides swift lookup and packet forwarding. ASIC based counters make SNMP management highly reliable and accurate.

- ▶ **Management Interface** Console port, WEB Browser Interface, and Simple Network Management Protocol (SNMP)

- ▶ **VLANs** Supports port or protocol based VLANs, up to 1,024 Groups, and Compatible IEEE802.1Q VLAN Tagging, VLAN Tagging ID up to 4K with GVRP for automatic connection to other parts of the network.

- ▶ **Port Mirroring** Supports source-port based, destination-port-based and source-destination-port mirroring

- ▶ **Spanning Tree** Insures only one path between any two nodes on network

- ▶ **Spanning Tree**

- ▶ **Broadcast Storm Monitoring and Filtering** Only allows a percentage of port's total bandwidth before broadcast traffic is dropped

- ▶ **Bandwidth rate limiting** Selectively set ingress and egress rate limiting on a per port basis in 100 Kbps increments starting at 100 Kbps.

- ▶ **Queue scheduling schemes** Packets can be transmitted by different priority schemes; FIFO, WRR, with Enable Delay Bound

- ▶ **Link Aggregation** Supports 802.3ad port trunking with flexible load distribution with 4 ports per trunk group

- ▶ **Class of Service** Supports 802.1p Class of service with 2-level priority queuing

- ▶ **IGMP** Groom multicast traffic to the ports needing it with IGMP snooping per port and IGMP Query mode

**Specifications**

Standards Compliance	IEEE802.3 10BASE-T 10Mbps, Half/Full Duplex IEEE802.3u 100BASE-TX, 10/100Mbps, Half/Full Duplex IEEE802.3z Gigabit SX/LX 1000Mbps IEEE802.3ab Gigabit 1000T 10/100/1000Mbps IEEE802.3x Flow control and Back-pressure IEEE802.1ad Link Aggregation IEEE802.1Q VLAN Tagging IEEE802.1q Quality of Service IEEE802.1p Class of service IEEE802.1d Spanning Tree Protocol IEEE802.1w Rapid Spanning Tree IEEE802.1x EAP Authentication
MAC Address Table	8K with Auto-learning function
Packet Buffer	3Mb
Backplane bandwidth	8.8 Gbps
System throughput	Wire speed 6.5 Mpps
Voltage	100 – 240 VAC
Frequency	50/60 HZ
Power Consumption	12 W
Operating Temperature	32° to 104° F (0° to 40° C)
Relative Humidity	10% to 90% non-condensing
Dimensions	<b>Width:</b> 17.4" [440 mm] <b>Depth:</b> 9.15" [225 mm] <b>Height:</b> 1.75" [44.5 mm]
Weight	6 lbs. 8 oz.
Emissions & Safety	FCC Class A, CE Mark, UL listed

**Technical Support & Warranty**

Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

## (24) 10/100 ports + (2) SFP/RJ-45 Combo ports



- ▶ Managed POE Switch
- ▶ 24 ports with full POE functionality; power limit per classification
- ▶ Legacy power signature detection
- ▶ IGMP v1, v2

### Features

- ▶ 15.4 Watts of DC power per port
- ▶ 24 ports with full PoE functionality
- ▶ Enable/Disable POE function
- ▶ Power limit by classification
- ▶ Power limit by management power feeding priority
- ▶ Legacy Power Signature Detection for unique electrical signatures
- ▶ Auto-Negotiation *see page 14*
- ▶ Auto-MDIX on all ports
- ▶ 12K Jumbo Frame support
- ▶ True non-blocking switching
- ▶ 8K MAC address table
- ▶ Back pressure half-duplex
- ▶ Flow control full-duplex
- ▶ Store and forward switching architecture
- ▶ 8.8 Gbps backplane
- ▶ 384Kbytes memory buffer

### Reporting Features

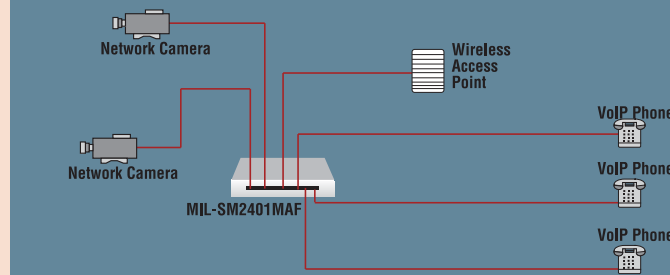
- ▶ **Management:** Web Management, Remote Management, Virtual IP Stacking
- ▶ **Firmware update:** TFTP firmware upgrade
- ▶ **System default:** Restore function for system default
- ▶ **Port Trunk:** Supports IEEE802.3ad port trunk with link aggregation control protocol (LACP). The trunk group up to 2 and maximum trunk port member up to 2 ports.
- ▶ **VLAN:** Port Based VLAN; IEEE802.1Q Tag VLAN, VLAN ID up to 4094; VLAN group up to 5
- ▶ **Quality of Service:** Support port based, Tag based and IPv4 ToS
- ▶ **Class of Service:** Per port supports 2 priority queues
- ▶ **Spanning Tree:** Supports IEEE802.1w rapid spanning tree and compatible with IEEE 802.1d
- ▶ **Port Mirror:** Supports RX packet mirror
- ▶ **IGMP:** Supports IGMP V1, V2
- ▶ **Broadcast Storm:** Enable/Disable, 5%, 10%, 20%, 25%

## MIL-SM2401MAF

NEW



Connect and power Wireless Access Points, Network Cameras and VOIP



### Ordering Info

**MIL-SM2401MAF**  
24-port 10/100 POE Remotely Managed switch with (2) SFP Combo Gigabit ports

### Specifications

Standards	IEEE Std. 802.3 10BASE-T 10Mbps, Half/Full Duplex; IEEE Std. 802.3u 100BASE-TX, 10/100Mbps, Half/Full Duplex; IEEE Std. 802.3x Flow control and Back-pressure; IEEE Std. 802.1ad Link Aggregation; IEEE Std. 802.1Q VLAN Tagging; IEEE Std. 802.1p Class of service; IEEE Std. 802.1d Spanning Tree Protocol; IEEE Std. 802.1X Authentication Protocol
Protocols	CSMA/CD
Technology	Store and Forward switching architecture
Transfer Rate	14,880 pps for 10Mbps 148,800 pps for 100Mbps
Connectors	<b>10/100 copper:</b> 24x RJ-45 with Auto-MDIX, Two SFP ports. Fast Ethernet <b>Fiber:</b> Multimode or Single Mode
MAC Address	8K MAC address table
Memory Buffer	384Kbytes (3Mbits)
Jumbo packet support	Max 12Kbytes jumbo packet size
Network Cable	<b>10BASE-T:</b> 2-pair UTP/STP Cat. 3, 4, 5 cable; EIA/TIA-568 100-ohm (100 m) <b>100BASE-TX:</b> 2-pair UTP/STP Cat. 5 cable; EIA/TIA-568 100-ohm (100 m)
Backplane	8.8Gbps
LEDs	<b>RJ-45 port:</b> 10/100; Link/Activity; Full duplex/Collision <b>Fiber:</b> Link/Activity <b>Power:</b> On/Off
Power Supply	Built-in AC power supply: AC 90~240V, 50/60Hz, 200W; Optional External AC/DC Power Supply with Integrated UPS 400W
Power Consumption	(DC) 20 watts (Non-POE functions)
Operation Temperature	0° to 40°C (32° to 96°)
Operation Humidity	10% to 90% (non-condensing)
Dimensions	<b>Width:</b> 17.0" [440 mm] <b>Depth:</b> 11.0" [280 mm] <b>Height:</b> 1.7" [44 mm]
EMI	FCC Class A, CE Mark
Safety Compliance	UL, cUL

# 48-port 10/100 Multi-Layer Stackable Managed Switch

**MIL-SM4804G**

10/100 copper

**10/100 with fiber**

10/100/1000 with fiber



## (48) 10/100 ports + (2) SFP/RJ-45 Combo ports & (2) stacking ports

- ▶ Auto-sensing 10/100 ports
- ▶ (2) hot-swappable 10/100/1000 Small Form Factor Pluggable interfaces
- ▶ (2) 10/100/1000 Stacking Ports
- ▶ Robust Security
- ▶ Multi-Layer Protocol Support
- ▶ Simplified Network Management
- ▶ Outstanding Value

## Most Powerful, Flexible Multi-Layer Switch in its Class

The MILAN Multi-Layer 10/100 switch delivers maximum throughput and flexibility where you need it:

- to high-density workgroups at the edge of the network, or
- in the backbone of small networks.

The non-blocking design of the switch delivers simultaneous, full wire-speed, low-latency throughput to all ports.

## Multi-Layer Management Features

- ▶ **Graphical User Interface** HTML browser-based with password protection for local and remote management
- ▶ **Command Line Interface** Industry-standard CLI
- ▶ **Front panel** Graphical representation of unit with real-time network and port status
- ▶ **Port Status** Displays current per-port configuration showing speed, flow-control, bandwidth status and port security status.
- ▶ **Port Statistics** Displays link, type and state of each port including RX/TX/Error for each port and unit. Table view also shows current, peak average & total packets for each port.

## Ordering Info

### MIL-SM4804G

48-port 10/100 Multi-Layer Stackable Managed Switch with (2) SFP Combo Gigabit ports and (2) Gigabit stacking ports

## Optional Accessories

**SFP Modules (see page 121)**

## Specifications

Connectors	<ul style="list-style-type: none"> <li>• 48-Port Fast Ethernet with Auto-MDI/MDIX (100BaseTX, 10BaseT): RJ-45</li> <li>• 2 Combo (RJ-45/SFP) Ports</li> <li>• 2 Gigabit Ethernet Ports with Auto-MDI/MDI-X (1000BASET, 100BASETX, 10BASET): RJ-45 for Stacking</li> <li>• Console: Serial (RS-232): DB9</li> </ul>
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LED Indicators	Port, Uplink, System, Diagnostic, Stack/Master
----------------	--

Performance	17.6 Gbps Switching Fabric 8k MAC Addresses
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Dimensions	<b>Width:</b> 17.4" [440 mm] <b>Depth:</b> 12.8" [324 mm] <b>Height:</b> 1.7" [43 mm]
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Mounting	Install into a standard 19-inch rack (1 RU height) or placed on a desktop; rackmount kit included
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Operating Temperature	32° to 104° F (0° to 40° C)
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Relative Humidity	10% to 90% non-condensing
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Power Requirements	Auto-switching, 110/240 VAC, 47 – 63Hz; 35W
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Standards Compliance	IEEE 802.1DF Spanning tree and bridge filters IEEE 802.1W Rapid spanning tree and bridge filters IEEE 802.1p Quality of Service (QoS) IEEE 802.1X EAP Authentication IEEE 802.1p Prioritization (Class of Service) IEEE 802.1Q Virtual LAN (VLAN) Tagging IEEE 802.3ad Link aggregation (LACP) IEEE 802.3ac Frame extension for VLAN tagging IEEE 802.3x Flow control and back pressure IEEE 802.3z 1000BaseSX/LX over single mode/ multimode fiber; max distance 49200 ft. (15 km) IEEE 802.3ab 1000BaseT over Cat. 5 UTP (4 pairs); max distance 328 ft. (100 meters) IEEE 802.3u 100BaseTX over Cat. 5 UTP (2 pairs); max distance 328 ft. (100 meters) IEEE 802.3 10BaseT over Cat. 3 UTP (2 pairs); max distance 328 ft. (100 meters) RFC 2674 Extended Bridge MIB RFC 2665 Ether-Like MIB RFC 2863 Interface MIB RFC 1493 Bridge MIB RFC 1213 MIB II
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Emissions & Safety	FCC Class A, CE Mark, UL listed
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Technical Support & Warranty	Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.
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- ▶ **Port Controls** Configure the state (enabled, disabled), link status (up, down) and mode (speed, duplex); Auto-Negotiation, flow control, priority and bandwidth limits.
- ▶ **Link Aggregation** Set up IEEE 802.3ad Port Trunking with flexible load distribution, up to 8 ports per trunk group.
- ▶ **VLAN Configuration** Supports port or protocol based VLANs up to 255 active VLANs (0~4094). GVRP for automatic VLAN registration and dynamic VLAN management.
- ▶ **Spanning Tree** Supports IEEE802.1D STP and IEEE802.1w RSTP
- ▶ **IGMP** Supports IGMP v1/v2 Snooping and Query functions
- ▶ **Port Mirroring** Monitor network traffic by Enable/disable Port Mirroring and select the ports for packet analysis
- ▶ **Remote Management** Supports SNMP v1/v2c, RMON, and Telnet
- ▶ **Security** Port and MAC-based IEEE802.1X Authentication, TACACS+, SSL, SSH v1.5/v2, and Access Control List (ACL)
- ▶ **Jumbo Frame** Supports up to 9100Kb Jumbo Frames
- ▶ **Quality of Service (QoS)**
  - L2/L3/L4 Traffic Classification/Priority Management, based on IEEE802.1p 4 priority queues control, based on IP Precedence/TOS & DSCP/TOS, and based on TCP/UDP port numbers
  - Supports WRR & SPF for priority queues, DiffServ/IPToS Prioritization, and Random Early Detection (RED)
- ▶ **Bandwidth Control** Supports Ingress/Egress based Bandwidth Limiting
- ▶ **IP Stacking** Single IP Address, closed loop Stacking, up to 8 units:
  - Manage Trunking, VLAN memberships, Packet priority and Port Mirroring across stack

## (9) 10/100/1000 ports + (2) SFP/RJ-45 Combo ports

- ▶ 9-port 10/100/1000BASE-T
- ▶ Auto MDI/MDI-X
- ▶ (2) 1000BASE-X SFP combo ports
- ▶ Indoor/Outdoor installation up to 60°C (140°F)
- ▶ Non-blocking switching architecture
- ▶ IEEE 802.1q VLAN tagging & Q in Q for SNMP GVRP/MVR
- ▶ IEEE 802.1p Class of Service 4 priority queues

## MIL-SM8002TG

NEW



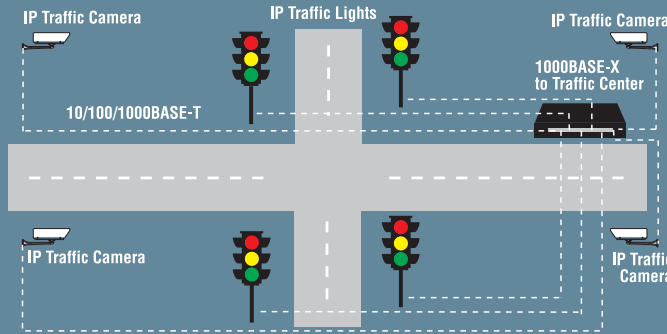
### Additional Features

- ▶ IGMP query and snooping
- ▶ 802.1X Authentication
- ▶ RADIUS/TACACS+
- ▶ Port Mirroring
- ▶ 8K MAC Address
- ▶ Telnet/Web-based management
- ▶ TFTP firmware upgrade
- ▶ Enable/disable ports
- ▶ Auto-Negotiation
- ▶ Forced modes, 10H/10H/100H/100F/1000F
- ▶ Auto-MDIX on all ports
- ▶ 802.3X Flow control
- ▶ Back-pressure
- ▶ 16Mb System Memory
- ▶ 8Mb Flash ROM
- ▶ 1Mbps Buffer
- ▶ Broadcast storm filter
- ▶ DHCP Client, Relay, Server
- ▶ SNTP and SMTP support
- ▶ MAC Address Security
- ▶ Bandwidth Allocation
- ▶ QoS port-based/Tag based, IPv4, Tos/Ipv4, IPv6, DiffServ
- ▶ Ingress & Egress MAC address filter & static source MAC address lock

### Software Features

- ▶ **Management:** Remote IP-Based Management, Web Management, SNMP V1/2, Telnet, Menu based CLI
- ▶ **Firmware update:** TFTP firmware upgrade and configuration backup
- ▶ **System default:** Restore function for system default
- ▶ **Port Trunk:** Supports IEEE802.3ad port trunk with link aggregation control protocol (LACP). The trunk group up to 2 and maximum trunk port member up to 2 ports.
- ▶ **VLAN:** Port Based VLAN; IEEE802.1Q, 4096 VLAN IDs, 256/2048 static/dynamic VLAN groups, 256 GVRP Groups
- ▶ **Quality of Service:** Support port based, Tag based and IPv4 ToS
- ▶ **Class of Service:** Per port supports 2 priority queues
- ▶ **Spanning Tree:** Supports IEEE802.1w rapid spanning tree and IEEE 802.1d
- ▶ **Port Mirror:** Supports RX packet mirror
- ▶ **IGMP:** Supports IGMP V1, V2
- ▶ **Broadcast Storm:** Enable/Disable, 5%, 10%, 20%, 25%

### Connect Indoor or Protected Outdoor Ethernet Devices over High Speed Dual Gigabit Links



### Ordering Info

**MIL-SM8002TG**  
9-port 10/100/1000 Indoor/Outdoor Remotely Managed switch with (2) SFP combo Gigabit ports

### Optional Accessories

SFP Modules (see page 121)

### Specifications

Standards	IEEE Std. 802.3 10BASE-T; IEEE Std. 802.3u 100BASE-TX; IEEE Std. 802.3z Gigabit fiber; IEEE Std. 802.3ab 1000BASE-T; IEEE Std. 802.3x Flow control and Back-pressure; IEEE Std. 802.3ad Port trunk with LACP; IEEE Std. 802.1d Spanning Tree Protocol; IEEE Std. 802.1w Rapid spanning tree; IEEE Std. 802.1p Class of service IEEE Std. 802.1q VLAN Tagging IEEE Std. 802.1x user authentication
Protocols	CSMA/CD
Technology	Store and Forward switching architecture
Connectors	10/100/1000 copper: 9x RJ-45 with AutoCross (Auto MDI/MDI-X), Two SFP ports
MAC Address	8K MAC address table
Memory Buffer	128Kbytes
Jumbo packet support	Max 9Kbytes jumbo packet size
Network Cable	<b>10BASE-T:</b> 2-pair UTP/STP Cat. 3, 4, 5 cable; EIA/TIA-568 100-ohm (100 m) <b>100BASE-TX:</b> 2-pair UTP/STP Cat. 5 cable; EIA/TIA-568 100-ohm (100 m); <b>1000BASE-T:</b> 4-pair UTP/STP Cat. 5e cable; EIA/TIA-568 100-ohm (100 m)
Backplane	18Gbps
LEDs	<b>RJ-45 port:</b> 10/100/1000; Link/Activity; Full duplex/Collision <b>Fiber:</b> Link/Activity <b>Power:</b> On/Off
Power Supply	Internal power: 100 – 200VAC
Power Consumption	(DC) 10 watts max.
Operation Temperature	0° to 60°C (32° to 140°F)
Operation Humidity	10% to 90% (non-condensing)
Dimensions	<b>Width:</b> 217 mm <b>Depth:</b> 140 mm <b>Height:</b> 43 mm
EMI	FCC Class A, CE Mark
Safety Compliance	UL, cUL

## (24) 10/100/1000 ports + (4) SFP/RJ-45 Combo ports

- ▶ Auto-sensing 10/100/1000 ports
- ▶ (4) hot-swappable Small Form Factor Pluggable interfaces
- ▶ L2/L3/L4 Traffic classification Prioritization
- ▶ IGMP v1, v2
- ▶ Robust Security
- ▶ Multi-Layer Protocol Support
- ▶ Simplified Network Management
- ▶ Outstanding Value

## MIL-SM24004TG

## 10/100/1000 with fiber



## Most Powerful, Gigabit Multi-Layer Switch in its Class

The MILAN Multi-Layer Gigabit Ethernet switch delivers maximum throughput and flexibility where you need it:

- to high-density workgroups at the edge of the network, or
- in the backbone of small networks.

It also supports L2/L4 Gigabit Switching performance and eliminates network bottlenecks with wire-speed switching fabric.

## Specifications

Connectors	<ul style="list-style-type: none"> <li>• 24-Port Gigabit Ethernet with Auto-MDI/MDIX (1000BaseT, 100BaseTX, 10BaseT): RJ-45</li> <li>• 4 Combo (RJ-45/SFP) Ports</li> <li>• Console: Serial (RS-232): DB9</li> </ul>
LED Indicators	Port, Uplink, System, Diagnostic
Performance	48 Gbps Switching Fabric 16k MAC Addresses
Buffer	1MB
Dimensions	<b>Width:</b> 17.4" [440 mm] <b>Depth:</b> 12.8" [324 mm] <b>Height:</b> 1.7" [43 mm]
Operating Temperature	32° to 104° F (0° to 40° C)
Relative Humidity	10% to 90% non-condensing
Power Requirements	Auto-switching, 110/240 VAC, 47-63Hz; 35W

### Standards Compliance

- IEEE 802.1D Spanning tree and bridge filters
- IEEE 802.1W Rapid spanning tree and bridge filters
- IEEE802.1S Multiple Spanning Tree
- IEEE 802.1p Quality of Service (QoS)
- IEEE 802.1X EAP Authentication
- IEEE 802.1p Prioritization (Class of Service)
- IEEE 802.1Q Virtual LAN (VLAN) Tagging
- IEEE 802.3ad Link aggregation (LACP)
- IEEE 802.3ac Frame extension for VLAN tagging
- IEEE 802.3x Flow control and back pressure
- IEEE 802.3z 1000BaseSX/LX over SM/MM fiber [15 km]
- IEEE 802.3ab 1000BaseT over Cat. 5 UTP (4 pairs) [100 m]
- IEEE 802.3u 100BaseTX over Cat. 5 UTP (2 pairs) [100 m]
- IEEE 802.3 10BaseT over Cat. 3 UTP (2 pairs) [100 m]
- RFC 2674 Extended Bridge MIB
- RFC 2665 Ether-Like MIB
- RFC 2863 Interface MIB
- RFC 1493 Bridge MIB
- RFC 1213 MIB II
- RFC 792 ICMP
- RFC 1112 IGMP
- RFC 2236 IGMPv2
- RFC 2618 RADIUS+
- RFC 1757 (group 1,2,3,9) RMON
- RFC 1157 SNMP
- RFC 1907 SNMPv2
- RFC 2030 SNMP

Emissions & Safety FCC Class A, CE Mark, UL listed

### Technical Support & Warranty

Free technical support and advanced warranty support for 5 years. Includes free telephone support, 24-hour support via web and ftp.

## Multi-Layer Management Features

- ▶ **Graphical User Interface:** HTML browser-based with password protection for local and remote management
- ▶ **Command Line Interface:** Industry-standard CLI
- ▶ **Front panel:** Graphical representation of unit with real-time network and port status
- ▶ **Port Status:** Displays current per-port configuration showing speed, flow-control, bandwidth status and port security status.
- ▶ **Port Statistics:** Displays link, type and state of each port including RX/TX/Error for each port and unit. Table view also shows current, peak average & total packets for each port.
- ▶ **Port Controls:** Configure the state (enabled, disabled), link status (up, down) and mode (speed, duplex); Auto-Negotiation, flow control, priority, bandwidth limits, MAC address learning mode & MAC filtering.
- ▶ **Link Aggregation:** Set up IEEE 802.3ad Port Trunking with flexible load distribution, up to 8 ports per trunk group.
- ▶ **VLAN Configuration:** Supports 802.1q tagged port or protocol based VLANs up to 255 active VLANs (0-4094). GVRP for automatic VLAN registration and dynamic VLAN management.
- ▶ **Spanning Tree:** Supports IEEE802.1D STP, IEEE802.1w RSTP and IEEE 802.1S Multiple Spanning Tree
- ▶ **IGMP:** Supports IGMP v1/v2 Snooping and Query functions
- ▶ **Port Mirroring:** Monitor network traffic by Enable/disable Port Mirroring and select the ports for packet analysis
- ▶ **Remote Management:** Supports SNMP v1/v2c, RMON, and Telnet
- ▶ **Security:** Port and MAC-based IEEE802.1X Authentication, TACACS+, SSL, SSH v1.5/v2, and Standard, Extended IP & MAC Access Control List (ACL)
- ▶ **Jumbo Frame:** Supports up to 9KB Jumbo Frames
- ▶ **Quality of Service (QoS):**
  - L2/L3/L4 Traffic Classification/Priority Management, based on IEEE802.1p 4 priority queues control, based on IP Precedence/TOS & DSCP/TOS, and based on TCP/UDP port numbers
  - Supports WRR & SPF for priority queues, DiffServ/IPToS Prioritization, and Random Early Detection (RED)
- ▶ **Bandwidth Control:** Supports Ingress/Egress based Bandwidth Limiting
- ▶ **Remote Firmware Upgrade:** and Remote Configuration Storage support
- ▶ Editable configuration file
- ▶ System Log
- ▶ SNTP Clock Synchronization
- ▶ DNS Server

## Ordering Info

### MIL-SM24004TG

24-port Gigabit Ethernet Multi-Layer Managed switch with (4) SFP Combo Gigabit Ports

### Optional Accessories

(sold separately)

### TN-SFP-xxxxx (see page 121)

Small Form Factor Pluggables

### For additional fiber interfaces use media converters:

Layer 1 Gigabit xGETF (pages 49 & 95)

Layer 2 10/100/1000 xGFEB (pages 46 & 93)

# 5 or 8-port 10/100BASE-TX Compact Switches

## (5) or (8) 10/100BASE-TX ports

- ▶ Full Duplex Flow Control
- ▶ Store-and-Forward
- ▶ Auto-Negotiating

## MIL-S500 & MIL-S800



With award-winning performance in an incredibly compact design, MILAN by Transition's MIL-S500 and MIL-S800 Switches auto-negotiate 10/100Mbps connections for fast and simple switching in workgroup, small office, and home environments. Features include:

### Full/Half Duplex

Each port capable of operating at full or half duplex, allowing up to 200 Mbps for end users. Flow control and back pressure minimize packet loss and maximize performance.

### High-performance Switching

Non-blocking architecture assures rapid packet delivery, while extensive MAC address tables and memory buffering provide swift lookup and packet forwarding.

### Automatic MDI/MDIX

Provides automatic cable detection on 10/100BASE-TX ports for adjusting to straight-through or crossover cables during installation.

### Ruggedized Chassis

Sturdy metal enclosures with optional mounting brackets and magnets for installation in nontraditional environments.

### Straightforward Diagnostics

Perpetual port status provided via front-side LEDs to simplify troubleshooting.

### Secure and Safe

UL, cUL, and TUV Certifications; conforms to IEEE 802.3, 802.3u, and 802.3x standards.

### MIL-S500 Features

- ▶ Filtering/Forwarding/Learning: Non-blocking, full wire speed
- ▶ Ports: Auto-negotiating for speed and duplex
- ▶ Forwarding mode: Store-and-forward
- ▶ Auto-MDI/MDIX: Crossover cables not needed
- ▶ MAC address table: Stores up to 4,000 addresses & 128KB memory buffer sharing
- ▶ LEDs: Power, 100 Mbps, Link/Activity, FDX/COL

### MIL-S800 Features

- ▶ Filtering/Forwarding/Learning: Full line rates
- ▶ Ports: Auto-negotiating for speed and duplex
- ▶ Forwarding mode: Store-and-forward
- ▶ Auto-MDI/MDIX: Crossover cables not needed
- ▶ MAC address table: Stores up to 8,000 addresses & 256KB memory buffer sharing
- ▶ LEDs: Power, 100 Mbps, Link/Activity, FDX/COL

## Ordering Info

**MIL-S500**  
5-Port 10/100BASE-TX Micro Switch

**MIL-S800**  
8-Port 10/100BASE-TX Switch

### Optional Accessories

(sold separately)

#### Mounting Brackets:

**MIL-BR500**  
Mounting bracket for MIL-S500

**MIL-BRSW**  
Mounting bracket for MIL-S800

## Specifications

Standards Compliance	IEEE Std. 802.3 10BASE-T Ethernet; IEEE Std. 802.3 100BASE-TX Ethernet; IEEE Std. 802.3x full-duplex flow control
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Network Interface	<b>10BASE-T:</b> RJ-45 Categories 3, 4, 5 100-ohm UTP <b>100BASE-TX:</b> RJ-45 Category 5 100-ohm UTP
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Dimensions	<b>MIL-S500:</b> Width: 4.3" [110 mm] Depth: 2.8" [70 mm] Height: 0.7" [19 mm]  <b>MIL-S800:</b> Width: 6.5" [165 mm] Depth: 4.0" [100 mm] Height: 1.0" [24 mm]
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Operating Temperature	0° to 45°C (32°F to 113°F)
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Storage Temperature	-25°C to 70°C (-13°F to 158°F)
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Operating Humidity	10% to 90% ( non-condensing )
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Relative Humidity	10% to 90%
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Weight	<b>MIL-S500:</b> 0.26 kg (9 oz) <b>MIL-S800:</b> 0.45 kg (1 lb.)
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External Power Supply	AC Input Voltage: 100 – 120 VAC North American; 200 – 220 VAC Continental Europe & UK; DC Output Power: 9V DC, 700mA
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Power Consumption	<b>MIL-S500:</b> 1.5 Watts maximum <b>MIL-S800:</b> 4.0 Watts maximum
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Compliance	<b>Safety:</b> UL, cUL, TUV <b>Emissions:</b> FCC Class B, CISPR 22 Class B, CE Mark
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Warranty	Comprehensive 5 years
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## (8) 10/100BASE-TX ports

- ▶ 10/100 Unmanaged Switch
- ▶ Internal power supply
- ▶ Store-and-Forward
- ▶ Auto-MDI/MDIX

The industry's smallest 8-port compact switch with an internal power supply—MILAN by Transition's MIL-S800i—auto-negotiates 10/100Mbps connections for fast and simple switching in workgroup, small office, and home environments. Features include:

### Full/Half Duplex

Each port is capable of operating at full or half duplex, allowing up to 200 Mbps for end users. Flow control and back pressure minimize packet loss and maximize performance.

### High-performance Switching

Non-blocking architecture assures rapid packet delivery, while 4K MAC address table and memory buffering provide swift lookup and packet forwarding.

### MDI/MDIX

Provides automatic cable detection on 10/100BASE-TX ports for adjusting to straight-through or crossover cables during installation.

## MIL-S800i



## 10/100 copper

10/100 with fiber  
10/100/1000  
10/100/1000 with fiber

### Ruggedized Chassis

Sturdy metal enclosures with wall holes mounts for installation in non-traditional environments

### Straightforward Diagnostics

Perpetual port status provided via LEDs on top of switch to simplify troubleshooting.

### Secure and Safe

Class B, UL, cUL, and TUV Certifications; conforms to IEEE 802.3, 802.3u, and 802.3x standards.

## Ordering Info

### MIL-S800i

8-port 10/100BASE-TX Micro Switch with internal power supply

## Specifications

Standards	IEEE Std. 802.3 10BASE-T Ethernet; IEEE Std. 802.3 100BASE-TX Ethernet; IEEE Std. 802.3x full-duplex flow control
Network Interface	<b>10BASE-T:</b> RJ-45 Categories 3, 4, 5 100-ohm UTP; <b>100BASE-TX:</b> RJ-45 Category 5 100-ohm UTP
Dimensions	Width: 6.3" [160 mm] Depth: 4.0" [100 mm] Height: 1.0" [28 mm]
Operating Temperature	0 to 45°C (32°F to 113°F)
Operating Humidity	10% to 90% ( non-condensing )
Storage Temperature	-25°C to 75°C (-13°F to 167°F)
Relative Humidity	10% to 95%
Weight	0.45 kg (1 lb.)
Internal Power Supply	AC Power: 100 – 240 VAC Line Frequency: 50/60Hz Power Output: 3.3 VDC@2A
Power Consumption	7 Watts maximum
Compliance	<b>Safety:</b> UL, cUL, TUV/GS, CE <b>Emissions:</b> FCC Class B, CISPR 22 Class B, CE Mark, VCCI Class B
Warranty	Comprehensive 5 years

## (5) or (8) 10/100BASE-TX ports + (1) fiber port

- ▶ Auto-Negotiation
- ▶ Port Setting via DIP switches
- ▶ Full/Half duplex Flow Control

## MIL-S501xx & MIL-S801xx



MILAN's 10/100Mbps Switches with Fiber provide multiple 10/100BASE-TX ports with one 100BASE-FX fiber port. Both the MIL-S501 and MIL-S801 Series are ideal for alleviating traffic bottlenecks in workgroup environments; by combining copper and fiber ports in the same chassis, they offer an inexpensive solution for segmenting LANs and easily interconnecting networks in campus or multi-tenant environments.

### High-Powered Switching

Each switch operates at wire speed with automatic MAC address learning and aging, requiring no user configuration; MIL-S801 has non-blocking 1.8Gbps architecture assuring rapid packet delivery.

### Half/Full Duplex

All ports running at 100Mbps operate in either half or full duplex mode, providing up to 200Mbps of bandwidth for end users.

### Simple Configuration

Flow control minimizes packet loss, while all copper ports auto negotiate for speed.

### Fiber Connectivity

Four different connection types: SC, ST, MT-RJ and VF-45 for Multi-mode; SC for Single-mode—ideal for linking long-distance network segments up to 37 miles (60 km).

### Auto MDI/MDIX

MIL-S801 Series offers automatic cable detection for adjusting 10/100BASE-TX ports to straight-through

or crossover cables during install

### Compact and Flexible

Sturdy metal enclosure with wall mounts, optional mounting brackets and all media connections on front panel.

## Specifications

Standards Compliance	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX/FX
System LEDs	Power, Speed, Link, Activity, and Duplex
Packet Forwarding	Store-and-Forward
Address Support	4K MAC
Fiber Port Uplink Options	
<b>SC/ST Connector Multimode:</b>	
Speed: 100BASE-FX	
Average Launch Power: -18 dBm	
Average Sensitivity: -30 dBm	
Average Power Loss Budget: 12 dBm	
Max Fiber Distance: 2 km	
Fiber Size: 62.5/125, 50/125	
<b>MT-RJ Connector Multimode:</b>	
Speed: 100BASE-FX	
Average Launch Power: -15.7 dBm	
Average Sensitivity: -33.5 dBm	
Average Power Loss Budget: 17.8 dBm	
Max Fiber Distance: 2 km	
Fiber Size: 62.5/125, 50/125	
<b>SC Connector Single Mode:</b>	
Speed: 100BASE-FX	
Average Launch Power: -6 dBm	
Average Sensitivity: -34 dBm	
Average Power Loss Budget: 28 dBm	
Max Fiber Distance: 60 km	
Fiber Size: 8/125, 9/125	
Operating Temperature	0° to 45°C (32°F to 113°F)
Storage Temperature	-25°C to 70°C (-13°F to 158°F)
Operating Humidity	10% to 90% ( non-condensing )

Relative Humidity	10% to 90%
Chassis	Metal
External Power Supply	MIL-S501
Internal Power Supply	MIL-S801
AC Input Voltage	100 – 120 VAC North American 200 – 220 VAC Continental Europe & UK
DC Output Power	9VDC, 700mA
Power Consumption	5.5 Watts maximum
Dimensions	<b>MIL-S501:</b> Width: 6.5" [165mm] Depth: 4.0" [100mm] Height: 1.0" [24mm]  <b>MIL-S801:</b> Width: 9.8" [250 mm] Depth: 5.2" [132 mm] Height: 1.5" [37 mm]
Weight	<b>MIL-S501:</b> 0.45 kg [1 lb.] <b>MIL-S801:</b> 1.35 kg [3 lbs.]
Safety	UL, cUL, TUV
Emissions	FCC Class B, CISPR 22 Class B, CE Mark
Warranty	Comprehensive 5 years

## Ordering Info

<b>MIL-S501ST</b>	5-Port 10/100BASE-TX + (1) 100BASE-FX multimode (ST) [2 km/1.2 miles]
<b>MIL-S501SC</b>	5-Port 10/100BASE-TX + (1) 100BASE-FX multimode (SC) [2 km/1.2 miles]
<b>MIL-S501SC-15</b>	5-Port 10/100BASE-TX + (1) 100BASE-FX single mode (SC) [15 km/9.3 miles]
<b>MIL-S501MT-15</b>	5-Port 10/100BASE-TX + (1) 100BASE-FX single mode (MT-RJ) [15 km/9.3 miles]
<b>MIL-S501SC-30</b>	5-Port 10/100BASE-TX + (1) 100BASE-FX single mode (SC) [30 km/18.6 miles]
<b>MIL-S501SC-60</b>	5-Port 10/100BASE-TX + (1) 100BASE-FX single mode (SC) [60 km/37.3 miles]
<b>MIL-S801ST</b>	8-Port 10/100BASE-TX + (1) 100BASE-FX multimode (ST) [2 km/1.2 miles]
<b>MIL-S801SC</b>	8-Port 10/100BASE-TX + (1) 100BASE-FX multimode (SC) [2 km/1.2 miles]
<b>MIL-S801SC-60</b>	8-Port 10/100BASE-TX + (1) 100BASE-FX single mode (SC) [60 km/37.3 miles]
<b>Optional Accessories</b> (sold separately)	
<b>Mounting Brackets:</b>	
<b>MIL-BRSW</b>	Mounting bracket for MIL-S501
<b>MIL-RMS801</b>	Mounting bracket for MIL-S801

# 16 or 24-port 10/100BASE-TX Compact Switches

## (16) or (24) 10/100BASE-TX ports

- ▶ Automatic MDI/MDIX
- ▶ Wire Speed Performance
- ▶ Auto-Negotiation for Speed and Duplex
- ▶ Store and Forward Architecture

## MIL-S1600S & MIL-S2400S



10/100 copper  
**10/100 with fiber**

10/100/1000  
10/100/1000 with fiber

The MIL-S1600S and MIL-S2400S compact Fast Ethernet Switches have sixteen or twenty-four 10/100 Base-TX ports with low latency and error-free performance provided via an advanced store-and-forward architecture. Other features include:

### Automatic MDI / MDIX

Cable detection and correction is automatic as the switch adjusts for straight-through or crossover cables during installation—no uplink port necessary.

### High-performance Switching

Non-blocking architecture assures rapid packet delivery and the extensive 8,000 MAC address table and memory buffering provide swift lookup and packet forwarding.

### Full Duplex Operation

Bandwidth for each port is effectively doubled, increasing the speed of a 100Mbps port to 200Mbps.

### Flow Control

Enhances packet transmission by full-duplex flow control and half-duplex back pressure, providing congestion control on busy ports.

### Rugged Chassis

Sturdy metal enclosures for added durability.

### Straight Forward Diagnostics

Perpetual port status provided via LEDs to simplify troubleshooting.

### Standards

Conforms to IEEE 802.3, 802.3u, and 802.3x standards.

## Ordering Info

### MIL-S1600S

16-port 10/100BASE-TX switch  
"small form factor"

### MIL-S2400S

24-port 10/100BASE-TX switch  
"small form factor"

## Specifications

Ports	<b>MIL-S1600S:</b> 16 fixed 10/100BASE-TX ports: RJ-45 connectors  <b>MIL-S2400S:</b> 24 fixed 10/100BASE-TX ports: RJ-45 connectors
Standards	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX/FX; IEEE 802.3x
Packet Forwarding	Store-and-Forward
Address Support	8K MAC entry
System LEDs	Power, Link/Activity
Switch Fabric	3.2Gbps for MIL-S1600S 4.8Gbps for MIL-S2400S
Latency	5 ms
Buffer Memory	512kb
Operating Temperature	0 to 45°C ( 32°F to 113°F )
Storage Temperature	-40°C to 70°C ( -13°F to 158°F )
Operating Humidity	10% to 90% ( non-condensing)
Relative Humidity	10% to 90%

Dimensions	Width: 9.8" [250 mm] Depth: 5.2" [132 mm] Height: 1.5" [37 mm]
Weight	3 lbs. [1.35 kg]
Chassis	Metal
Mounting	Desktop rubber feet and rack mount kit included
Safety	UL, cUL, CE, LVD
Emissions	FCC Class A, CE Mark
Power Supply	Universal AC power input: 100 to 240 VAC 50 – 60Hz; Output rate: +3.3V/3A
Warranty	Comprehensive 5 years

## (16) or (24) 10/100BASE-TX ports + optional fiber module

- ▶ Automatic MDI/MDIX
- ▶ Optional Fiber
- ▶ Wire Speed Performance
- ▶ Auto-Negotiation for Speed and Duplex
- ▶ Store and Forward Architecture

## MIL-S1600 & MIL-S2400



MILAN by Transition's MIL-S1600 and MIL-S2400 Fast Ethernet Switches have sixteen and twenty-four 10/100Base-TX ports, respectively, with the option of adding 100Base-FX modules. Low latency, error-free performance is provided via an advanced store-and-forward architecture. Other features include:

### Automatic MDI / MDIX

Cable detection and correction is automatic as the switch adjusts for straight-through or crossover cables during installation.

### Full Duplex Operation

Bandwidth for each port is effectively doubled, increasing the speed of a 100Mbps port to 200Mbps.

### Flow Control

Enhances packet transmission by full-duplex flow control and half-duplex back pressure, providing congestion control on busy ports.

### Optional Fiber Port

Front-panel accessible fiber port is available in either multimode or single mode models and a variety of connector types for extending network distances up to 60 km.

### Support for Local and Long-Haul Connectivity

Connects to legacy copper networks while simultaneously linking distant segments via multimode or single mode fiber.

### Installation

Rack-mount design and for added sturdiness the switches are designed with metal chassis and include a rack mount kit.

### MIL-S1600 Only Management

- ▶ Local only via Serial port
- ▶ Administrative Port Control
- ▶ Per port VLANs overlapping

## Ordering Info

### MIL-S1600

16-port 10/100BASE-TX switch with optional fiber module

### MIL-S2400

24-port 10/100BASE-TX switch with optional fiber module

## Optional Modules

(sold separately)

### MIL-L1624SC

(SC) multimode module  
[2 km / 1.2 miles]

### MIL-L1624ST

(ST) multimode module  
[2 km / 1.2 miles]

### MIL-L1624SC-60

(SC) single mode module  
[60 km / 37.3 miles]

## Optional Accessories

(sold separately)

### Mounting Brackets:

### MIL-BR1624W

Mounting bracket for MIL-S1600 & MIL-S2400

## Specifications

Standards Compliance	IEEE Std. 802.3 10BASE-T; IEEE Std. 802.3u 100BASE-TX/FX; IEEE Std. 802.3.x
Fiber Port Options	<b>SC/ST Connector Multimode</b> Speed: 100BASE-FX Average Launch Power: -18 dBm Average Sensitivity: -30 dBm Average Power Loss Budget: 12 dBm Max Fiber Distance: 2km Fiber Size: 62.5/125, 50/125  <b>SC Connector Single mode</b> Speed: 100BASE-FX Average Launch Power: -6 dBm Average Sensitivity: -34 dBm Average Power Loss Budget: 28 dBm Max Fiber Distance: 60km Fiber Size: 8/125, 9/125
Ports	16 or 24 fixed 10/100BASE-TX ports: RJ-45 connectors Optional 100BASE-FX port RS-232C Serial console with DB-9 connector (provides local management for MIL-S1600)
System LEDs	Power, Speed, Link, Activity, and Duplex
Switch Fabric	<b>MIL-S1600:</b> 3.6 Gbps <b>MIL-S2400:</b> 6.5 Gbps
Packet Forwarding	Store-and-Forward
Address Support	4K MAC entry

Power Consumption	<b>MIL-S1600:</b> 10 Watts max <b>MIL-S2400:</b> 13 Watts max
Operating Temperature	0 to 45°C ( 32°F to 113°F )
Storage Temperature	-25°C to 70°C ( -13°F to 158°F )
Operating Humidity	10% to 90% ( non-condensing)
Relative Humidity	10% to 90%
Internal power	Auto-sensing 100 – 240AV Country Specific; Power Supply @ 50 – 60Hz
Dimensions	Width: 17.4" [440 mm] Depth: 6.3" [160 mm] Height: 1.75" [44 mm]
Weight	2.3 kg (5 lbs.)
Chassis	Metal
Mounting	Rack mount brackets and desktop rubber feet included
Compliance	<b>Safety:</b> UL, cUL, TUV <b>Emissions:</b> FCC Class A, CISPR 22 Class A, CE Mark
Warranty	Comprehensive 5 years

# 5 or 8-port 10/100/1000BASE-T Unmanaged Switches

## (5) or (8) 10/100/1000BASE-T ports

- ▶ Full wire speed reception and transmission with 10 or 16 Gbps backplane speed
- ▶ Supports IEEE802.3x Flow Control for full duplex
- ▶ Rugged metal chassis with external power supply

## MIL-S5000T & MIL-S8000T



10/100 copper  
**10/100 with fiber**

10/100/1000  
10/100/1000 with fiber

## The Most Affordable Way to Go Gig!

With Gigabit Ethernet rapidly gaining in popularity, we are excited to introduce new 5 or 8-Port Gigabit Ethernet switches that will transform your current crawling Fast Ethernet network into blazing fast network that runs at 1000 Mbps!

### Five or Eight 10/100/1000BaseT Ports in a small footprint

The MIL-S5000T/S8000T are hard-working switches that deliver exceptional performance. Right out of the box, the switches give you five or eight 10/100/1000 Gigabit Ethernet ports and best yet, they take up as little desk space as your tiny USB hub. Imagine transferring data/voice/multimedia files across your network at 2 Gbps full duplex; the waiting game is eliminated. Whether you need 10BaseT, 100BaseTX or 1000BaseT, these switches are ready to run with any version of Ethernet over copper cabling.

### Performance, Performance, Performance

MILAN once again delivers the highest performance switch in its class. A single integrated switch engine automatically filters and forwards traffic at full line rate for all 5 or 8 ports simultaneously.

### Features:

- ▶ (5) or (8) 10/100/1000BaseT ports
- ▶ Small footprint takes up minimal desktop space
- ▶ Compatible with any computers/laptop machines with an Ethernet port
- ▶ Supports Auto-MDI/MDIX which eliminates cabling confusion

## Ordering Info

**MIL-S5000T**  
5-port 10/100/1000BASE-T switch

**MIL-S8000T**  
8-port 10/100/1000BASE-T switch

## Specifications

Connectors	<p><b>MIL-S5000T:</b> (5) 10/100/1000 Mbps Gigabit Ethernet (10BaseT, 100BaseTX, 1000BaseT): RJ-45</p> <p><b>MIL-S8000T:</b> (8) 10/100/1000 Mbps Gigabit Ethernet (10BaseT, 100BaseTX, 1000BaseT): RJ-45</p>	Standards Compliance	<p><b>Network:</b> IEEE 802.3z/ab Gigabit Ethernet over 4 pairs of UTP Category 5 (1000BaseT); IEEE 802.3u Fast Ethernet over 2 pairs of UTP Category 5 (100BaseTX); IEEE 802.3 Ethernet (10BaseT)</p> <p><b>Expansion:</b> Auto-Uplink (MDI/MDIX) on all five RJ-45 ports. Uplink to additional switches using standard or crossover cables</p>
Status Indicators	Power plus 3 indicators per RJ-45 port (link/activity, 10/100 Mbps, 1000 Mbps)	Operating Temperature	32° to 104° F (0° to 40° C)
Performance	<p><b>Flow Control:</b> Supports IEEE802.3x Flow Control</p> <p><b>Memory:</b> Embedded 256KB packet buffer</p> <p><b>Address Table:</b> 8K entries</p>	Relative Humidity	10% to 90% non-condensing
Case	Rugged metal chassis with desk-mount kit included	Power	<p><b>MIL-S5000T:</b> External power supply; Output: DC 7.5V/1.5A; Consumption: 8.5 watts (max.)</p> <p><b>MIL-S8000T:</b> External power supply; Output: DC 5.0V/2.4A; Consumption: 11.5 watts (max.)</p>
Dimensions	<p><b>MIL-S5000T:</b> Width: 6.7" [171 mm] Depth: 3.9" [98 mm] Height: 1.1" [29 mm]</p> <p><b>MIL-S8000T:</b> Width: 7.5" [190 mm] Depth: 4.7" [120 mm] Height: 1.5" [38 mm]</p>	Emissions	FCC Class A and CE Mark
		Warranty	5-year product warranty covers defects in manufacturing and workmanship; Technical Support: 5 years of free telephone support plus 24-hour support via web

## MIL-S8000G



### (8) 10/100/1000BASE-T ports

- ▶ 10/100/1000Mbps - All Ports
- ▶ Automatic MDI/MDIX
- ▶ Wire Speed Performance
- ▶ Auto-Negotiation for Speed and Duplex
- ▶ Store and Forward Architecture
- ▶ Light Console Management
- ▶ Port-based Vlans
- ▶ Port Mirroring
- ▶ Port Trunking

Gigabit Ethernet over copper technology is a cost-effective way to upgrade network equipment from Fast Ethernet to Gigabit speeds. By using standard 4-pair Category 5 copper cabling, you don't need to pull expensive fiber optic cabling. This technology will create high-speed backbone connections between switches, servers, database and end stations.

The MILAN MIL-S8000G Gigabit Ethernet Switch has eight 10/100/1000 Base-TX ports with low latency and error-free performance provided via an advanced store-and-forward architecture.

Other features include:

- ▶ **Automatic MDI / MDIX:** Cable detection and correction is automatic as the switch adjusts for straight-through or crossover cables during installation - no uplink port necessary
- ▶ **High-performance Switching:** Non-blocking architecture backplane of 16G assures rapid packet delivery and the extensive 8,000 MAC address table and memory buffering provide swift lookup and packet forwarding.

▶ **Full Duplex Operation:** Bandwidth for each port is effectively doubled, increasing the speed of a 1000Mbps port to 2000Mbps

▶ **Flow Control:** Enhances packet transmission by full-duplex flow control and half-duplex back pressure, providing congestion control on busy ports

▶ **Console Management:** Light management via the console port- Port Status, Port configuration, Port-based VLANs, Port trunking, Port Mirroring, Aging

▶ **Rugged Chassis:** Standard 19-inch rackmount design with mounting brackets included

▶ **Standards:** Conforms to IEEE 802.3, 802.3u, 802.3ab and 802.3x standards

### Ordering Info

**MIL-S8000G**  
8-port 10/100/1000BASE-T switch with console management

### Specifications

Ports	8 fixed 10/100/1000BASE-TX ports: RJ-45 connectors
Standards	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX; IEEE 802.3x Flow Control; IEEE 802.3ab 1000BASE-T
Packet Forwarding	Store-and-Forward
Address Support	8K MAC entry
System LEDs	<b>Unit:</b> Power <b>Per Port:</b> 100, 1000, Link/Activity, Full Duplex/ Collision
Switch Fabric	16 Gbps
Buffer Memory	512kb
Operating Temperature	0 to 45°C ( 32°F to 113°F )
Storage Temperature	-40°C to 70°C ( -13°F to 158°F )
Operating Humidity	10% to 90% ( non-condensing )
Relative Humidity	10% to 90%

Dimensions	<b>Width:</b> 17.4" [440 mm] <b>Depth:</b> 8.8" [224 mm] <b>Height:</b> 1.75" [44 mm]
Weight	2 kg
Chassis	Metal
Mounting	Desktop rubber feet included Rackmount kit included
Safety	UL, cUL
Emissions	FCC Class A, CE Mark
Power Supply	Universal AC power input: 100 to 240 VAC 50-60Hz
Power Consumption	30 Watts maximum
Warranty	Comprehensive 5 years

## (8) 10/100/1000BASE-T ports + (1) SFP slot

- ▶ SMART features include: console Management, 4K VLANs, QoS, and Broadcast Storm Filtering.
- ▶ Full wire speed reception and transmission with 16 Gbps backplane speed.
- ▶ Rugged metal chassis with Internal power supply

## MIL-S8001TG

10/100 copper  
10/100 with fiber

**10/100/1000**

10/100/1000 with fiber



## The Smart Choice for Flexible, Gigabit Ethernet!

With Gigabit Ethernet rapidly becoming the de facto standard, MiLAN Technology is proud to introduce our new 8-Port Gigabit Ethernet switch. The new MIL-S8001TG will transform your current Fast Ethernet network into a blazing fast Gigabit Ethernet network that runs at 1000 Mbps!

### Converge Copper and Fiber Gigabit Networks

The MIL-S8001TG is a hard-working switch that delivers exceptional performance. Right out of the box, the MIL-S8001TG gives you eight 10/100/1000 Gigabit Ethernet ports and a Mini-GBIC slot that will interface with any industry-standard Small-Form-Pluggable Gigabit Ethernet Interface transceivers. The addition of the Mini-GBIC slot allows for flexible Gigabit fiber deployment by converging it with cost-effective Gigabit copper connectivity. Imagine transferring data/voice/multimedia files across your network at 2 Gbps full duplex per port, the waiting game is over.

### Smart Connectivity

Like all MiLAN unmanaged switches, the MIL-S8001TG is completely plug-and-play; no configuration is required for basic operation. Advanced configurations can be accessed through MiLAN's easy to use menu-driven management system.

### Advanced Features

- ▶ **Console-Managed:** All advanced features are accessible from an easy-to-use console interface. No cryptic command line commands or third party network management applications required.
- ▶ **VLAN:** Supports 4K 802.1Q tagged-based VLANs plus port-based VLANs
- ▶ **Quality of Service (QoS):** 802.1p/TOS support efficiently control network resources by classifying traffic and prioritizing network traffic flows
- ▶ Supports **Broadcast Storm Filtering** that eliminates unnecessary network traffic
- ▶ Increase network performance with **9.5KB Jumbo Frame** support

## Ordering Info

### MIL-S8001TG

8-port 10/100/1000BASE-T switch with (1) SFP uplink slot

### Optional Accessories

(sold separately)

### TN-SFP-xxxxx (see page 121)

Small Form Factor Pluggables

## Specifications

**Connectors** **Copper:** Eight 10/100/1000 Mbps Gigabit Ethernet (10BaseT, 100BaseTX, 1000BaseT): RJ-45

**Fiber:** One Industry-Standard Small-Form-Pluggable GBIC transceiver slot

**Status Indicators** **RJ-45:** Power plus 3 indicators per RJ-45 port (link/activity, 10/100/1000 Mbps, Duplex/Collision)

**Mini-GBIC:** Link/Activity

**Console** RS-232

### Performance

**Efficiency:** Gigabit Switching (1,488,000 pps) and Fast Ethernet Switching (148,800 pps)

**Flow Control:** Supports IEEE802.3x Flow Control (Full-Duplex) and Back Pressure (Half-Duplex)

**Switch Architecture:** Single-Chip non-blocking wire-speed design, 16 Gbps Backplane

**Memory Embedded:** 1.5Mb packet buffer

**Address Table:** 4K entries

### Software Features

**VLAN:** Port Based VLAN up to 8 groups; 4K IEEE802.1Q Tag VLAN

**Quality of Service (QoS):** 2 Types of quality of service: 1.Port based priority. 2. 802.1p/TOS priority tag.

**Priority Queue:** System provides 4 queues for High and Low priority.

### Software Features (cont'd.)

**Queue Ratio:** High / Middle / Low/ Lowest=8/4/2/1

**Trunking:** Supports one trunk group, and the trunk member can be Port(5,6,7,8),Port(6,7,8) or Port(7,8)

**Broadcast Storm:** Disable or Enable (Supports rate setting)

**Case** Rugged 19" rack-mountable metal chassis (Rack-mount kit included)

**Dimensions** **Width:** 250 mm  
**Depth:** 132 mm  
**Height:** 37 mm

**Power** Internal Universal power supply; Input: 90 – 240V, 50/60Hz; Output: DC 5 V/4 A (internal)

**Power Consumption** 22 watts (max.)

### Standards Compliance

**Network:** IEEE 802.3ab 1000BaseT, IEEE 802.3u 100BaseTX; IEEE 802.3 10BaseT; IEEE 802.3z 1000BaseSX/LX; IEEE 802.3x Flow Control

**Expansion:** Auto-MDI/MDIX on all eight RJ-45 ports. Uplink to additional switches using standard or crossover cables

**Mini-GBIC slot:** Compatible with industry standard small-form-pluggable GBICs for a wide variety of fiber connections and distances

**Emissions:** FCC Class A and CE Mark

**Safety:** EN60950

**Operating Temperature** 32° to 113°F (0° to 45°C)

**Relative Humidity** 10% to 90% non-condensing

**Warranty** 5-year product warranty covers defects in manufacturing and workmanship; 5 years of free telephone support plus 24-hour support via web.

## (16) or (24) 10/100/1000BASE-T ports + (2) SFP slots

- ▶ Full wire speed reception and transmission with 48 Gbps backplane speed
- ▶ 2 SFP Combo Ports for Optical Connectivity
- ▶ Rugged metal chassis with external power supply
- ▶ Supports IEEE802.3x Flow Control for full duplex
- ▶ JUMBO Frames Support

## MIL-S16002TG & MIL-S24002TG



## Next Generation of Copper and Fiber Switching

The switch provides a 48Gbps Gigabit switching performance with an added benefit of combining copper and fiber interfaces in a compact 1U design. The MIL-S16002TG and MIL-S24002TG delivers cost-efficient switching capability for 16 or 24 ports of Copper Gigabit Ethernet and two combo ports for SFP based Gigabit Ethernet.

### Two Combo SFP Ports

Both switches enable fiber connectivity through two hot-swappable Small Form-factor Pluggable (SFP) gigabit interfaces.

With Gigabit Ethernet rapidly gaining in popularity, network administrators are demanding higher density 10/100/1000 Mbps switches.

### (16) or (24) 10/100/1000Base-T Ports

The MIL-S16002TG and MIL-S24002TG are hard-working switches that deliver exceptional performance. Combining wire-speed switch fabric together with shared memory architecture design,

they eliminate head-of-line blocking and easily out perform other first generation Gigabit switches using old-fashioned “bridge” architecture. Whether you need 10BaseT, 100BaseTX or 1000BaseT, these switches are ready to run with any version of Ethernet over copper cabling.

### Performance, Performance, Performance

MiLAN by Transition Networks delivers the highest performance switch in its class. A single integrated switch engine automatically filters and forwards traffic at full line rate for all 16 or 24 ports simultaneously. With a Jumbo Frame compatible network infrastructure, you'll be transferring data at Ethernet Packet of 9 KB instead of 1.5KB—that's almost 4X larger than conventional switches.

Whether your workgroup has 10 nodes or 32K nodes, the MIL-S16002TG learns and supports all your addresses in memory for maximum network throughput.

## Ordering Info

### MIL-S160002TG

16-port 10/100/1000BASE-T switch with (2) SFP uplink ports

### MIL-S240002TG

24-port 10/100/1000BASE-T switch with (2) SFP uplink ports

## Optional Accessories

SFP Modules (see page 121)

## Specifications

### Connectors

**MIL-S16002TG:** (16) 10/100/1000 Mbps Gigabit Ethernet (10BaseT, 100BaseTX, 1000BaseT): RJ-45 plus 2 SFP combo open slots for 1000Base-x, optical or copper SFP modules

**MIL-S24002TG:** (24) 10/100/1000 Mbps Gigabit Ethernet (10BaseT, 100BaseTX, 1000BaseT): RJ-45 plus 2 SFP combo open slots for 1000Base-x, optical or copper SFP modules

### Status Indicators

Power plus LED indicators per RJ-45 port (duplex, link/activity, 10/100 Mbps, 1000 Mbps)

### Performance

**Switch Architecture:** Shared memory

**Maximum Frame Size:** 9 KB Jumbo Frame

**Filtering and Forwarding:** Includes multi-layer filtering and forwarding

**Forwarding Table:** 8K MAC addresses

**RAM Buffer:** 2Mbps

### Case

Rugged Metal Chassis

### Dimensions

Width: 17.3" [440 mm]  
Depth: 8.81" [224 mm]  
Height: 1.7" [44 mm]

### Weight

8.25 lbs.

### Standards Compliance

**Network:** IEEE 802.3ab Gigabit Ethernet over 4 pairs of UTP Category 5 (1000BaseT);

IEEE 802.3ab Gigabit Ethernet over Fiber optics

(1000Base-SX/LX);

IEEE 802.3u Fast Ethernet over 2 pairs of UTP Category 5

(100BaseTX);

IEEE 802.3 Ethernet (10BaseT)

**Protocol:** CSMA/CD

**Expansion:** Auto-MDI/MDIX on all 24 RJ-45 ports

### Operating Temperature

32° to 104° F (0° to 40° C)

### Relative Humidity

10% to 95% non-condensing

### Power

100 – 240 VAC, 50/60 Hz, internal switching supply

### Power Consumption

**MIL-S16002TG:** 47 watts (max.)

**MIL-S16002TG:** 60 watts (max.)

### Emissions

FCC Class A and CE Mark

### Warranty

Five-year product warranty covers defects in manufacturing and workmanship; Five-year technical support plus 24-hour support via web

# 4-port Modular Unmanaged Switch

## Modular 10/100 or 1000 Copper + Fiber Switch System

- ▶ Auto-Negotiation
- ▶ Port Setting via DIP switches
- ▶ Full/Half duplex Flow Control

MIL-S1000

10/100 copper  
10/100 with fiber  
10/100/1000

10/100/1000 with fiber



### Additional Features

The MILAN Modular Switch with Fiber combines media conversion with a robust switching architecture to provide full wire speed across all ports and a 9.6Gbps back plane speed. Populate the compact 4-slot chassis with any of up to eleven Fiber or Ethernet modules and create an affordable solution for nearly any local area switching requirement.

### Full/Half Duplex

Each port is capable of operating at full or half duplex, allowing up to 200 Mbps for end users. Flow control and back pressure minimize packet loss and maximize performance.

### High-performance Switching

Modules support up to 12K MAC addresses, with automatic address learning and aging eliminating the need for user configuration; store-and-forward architecture with filter and forwarding rates at wire speeds.

### Fiber Connectivity

Ten different fiber modules with connectors for SC, ST, MT-RJ and VF-45 to meet distance requirements from 2 to 10 km.

### Straight-forward Diagnostics

Perpetual port status provided via LEDs to simplify troubleshooting.

### Secure and Safe

UL and TUV Certifications; conforms to IEEE 802.3, 802.3u, and 802.3z standards.

### Ordering Info

#### MIL-S1000

Modular Switch System with 4-Expansion Slots

#### Optional Modules

(sold separately)

#### MIL-S2612

100Mbps 2-Port Fiber (ST) multimode  
[2 km / 1.2 miles]

#### MIL-S2613

100Mbps 2-Port Fiber (SC) multimode  
[2 km / 1.2 miles]

#### MIL-S2622

100Mbps 4-Port Fiber (ST) multimode  
[2 km / 1.2 miles]

#### MIL-S2623

100Mbps 4-Port Fiber (SC) multimode  
[2 km / 1.2 miles]

#### MIL-S3630

10/100Mbps 8-Port UTP

#### MIL-S6603LX

1000Mbps 1-Port Fiber (SC) single mode  
[10 km / 6.2 miles]

#### MIL-S6603SX

1000Mbps 1-Port Fiber (SC) multimode  
[220 m / 722 ft.]

#### MIL-S6700T

1000Mbps 1-Port Copper RJ-45  
[100 m / 328 ft.]

### Specifications

Standards Compliance	IEEE 802.3 10BASE-T; IEEE 802.3u 100BASE-TX/FX; IEEE 802.3z 1000BASE-X
Fiber Port Options	<p><b>SC/ST Connector multimode</b> Speed: 100BASE-FX Min TX PWR: -19.0 dBm Max TX PWR: -14.0 dBm RX Sensitivity: -30.0 dBm Max In PWR: -14.0 dBm Link Budget: 11.0 dB</p> <p>Speed: 1000BASE-SX Min TX PWR: -9.5 dBm Max TX PWR: -4.0 dBm RX Sensitivity: -18.0 dBm Max In PWR: 0.0 dBm Link Budget: 8.5 dB</p> <p><b>SC Connector single mode</b> Speed: 1000BASE-LX Min TX PWR: -9.5 dBm Max TX PWR: -3.0 dBm RX Sensitivity: -20.0 dBm Max In PWR: -3.0 dBm Link Budget: 10.5 dB</p>
System LEDs	Power, Speed, Link, Activity, and Duplex
Packet Forwarding	Store-and-Forward
Address Support	12K MAC entry
Operating Temperature	0 to 45°C (32°F to 113°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Operating Humidity	10% to 90% ( non-condensing )

AC Input Voltage	100VAC @ 60 Hz; 240VAC @ 50 Hz
Input Fuse	2A
Power Consumption	1.5 Watts maximum
Power cords available	North American, Continental Europe, United Kingdom
Dimensions	<p><b>Width:</b> 17.3" [440 mm] <b>Depth:</b> 8.8" [225 mm] <b>Height:</b> 2.6" [66 mm]</p>
Weight	3.9 kg [8.75 lbs]
Chassis	Metal
Rack mount	Rack mounts with kit included
Safety	UL 1950, CSA 22.2 NO. 950, (EN60950) TUV, VCCI
Emissions	FCC Class A, EN55022 Class A, EN50082-1, CE Mark
Warranty	Comprehensive 5 years

# Power Over Ethernet (PoE) Injectors & Splitters

## High-Gain Panel Directional 2.4 GHz Antenna

- ▶ Ensures uninterrupted network operation by providing a "power safe" path to the user
- ▶ Intelligent detection process to detect Power over Ethernet enabled terminals and protect legacy endpoints
- ▶ Furnishes easy and cost-effective installation with fewer cables and electrical outlets
- ▶ 1U height and 19" Rack mountable (MIL-L800i only)
- ▶ Provides one central secure location for power (MIL-L800i & MIL-L100i)

### Best Way to Bring Power to Your Network

MILAN by Transition's new EmPowered Ethernet™ Series Power over Ethernet solutions deliver unified supply of data, voice, and video as well as electrical power through a single source by sending power over standard Category 5 and above twisted pair cables. Power over Ethernet simplifies installation and eliminates the need to run separate power cords and LAN cables to each Access Point or port locations.

Our new PoE products provide organizations with affordable, easy-to-use solutions that enable them to migrate their network infrastructure to support a growing number of advanced cost-saving, performance enhancing applications, such as streamlining wireless, VOIP, Network IP camera deployments, and centralized power backup solutions. Whether on a factory floor or in an enterprise facility, running power to hard to reach locations with

MILAN by Transition's Power over Ethernet solutions significantly reduce cabling and outlet requirements while providing the lowest total cost of ownership.

### IEEE802.3af Compliant

The EmPowered Ethernet™ Series Power over Ethernet solutions are IEEE802.3af compliant, which means that you are ensured of the following:

**Legacy Installation:** ensures safe delivery of power to existing legacy devices as well as power-enabled terminals.

**Preservation of Cabling Infrastructure:** avoids altering existing wiring and does not damage cabling infrastructure already in place.

**Data Integrity:** Power delivery over Ethernet cables does not cause data degradation or loss of data integrity.

## MIL-x100x



## wireless products

## poe injectors & splitters

3x/as400 repeaters  
cabling connectors & baluns  
patch cords  
reference

## Ordering Info

### MIL-L100i

EmPowered™ Ethernet 1-port POE Injector

### MIL-L800i

EmPowered™ Ethernet 8-Port POE Injector Hub

### MIL-L100s

EmPowered™ Ethernet 1-port POE Dual Voltage Splitter (5v/12V)

## Specifications

### MIL-L100i

Standards	IEEE802.3af Compliant
LEDs	<b>System:</b> Power
Ports	<ul style="list-style-type: none"> <li>• (1) DATA IN RJ-45 Ethernet Port</li> <li>• (1) DATA OUT PoE Injector RJ-45 Ethernet Port</li> </ul>
Cable Requirements	<b>10BASE-T:</b> 2-pair UTP/STP Cat.3,4,5 cable EIA/TIA-568 100-ohm(100 m) <b>100BASE-TX:</b> 2-pair UTP/STP Cat.5 cable EIA/TIA-568 100-ohm(100 m)
Weight	200g
Dimensions	<b>Width:</b> 117 mm <b>Depth:</b> 60 mm <b>Height:</b> 35 mm
Power Output	-48 VDC, 300 mA
Power Input	AC 100~240V, 50~60Hz, 0.3A
Operating Environment	0~ 40°C , 90% Relative Humidity (non-condensing)
Storage Temperature	0~70°C, 95% Relative Humidity (non-condensing)
EMI and Safety	FCC Class B, CE Mark; UL, cUL, CE/EN60950

## Specifications

### MIL-L800i

Standards	IEEE802.3af Compliant
Management	Microsoft® Windows-based utility for power management
Power Management Functions	<ul style="list-style-type: none"> <li>• Current ports serviced list</li> <li>• System total serviced power budget</li> <li>• Power port disable/enable</li> <li>• Power support priority</li> <li>• Power overload auto shut down</li> <li>• Power port operation status</li> <li>• Power consumption limit</li> </ul>
LEDs	<b>System:</b> Power <b>Per Port:</b> Port Forwarding, Power Off
Ports	<ul style="list-style-type: none"> <li>• (8) DATA IN RJ-45 Ethernet Ports</li> <li>• (8) DATA OUT PoE Injector RJ-45 Ethernet Ports</li> <li>• (1) RS-232 Console Port</li> </ul>
Cable Requirements	<b>10BASE-T:</b> 2-pair UTP/STP Cat.3,4,5 cable; EIA/TIA-568 100-ohm(100 m) <b>100BASE-TX:</b> 2-pair UTP/STP Cat.5 cable; EIA/TIA-568 100-ohm(100 m)
Weight	2.7 kg
Dimensions	440 mm x 224 mm x 44 mm (W x D x H)
Mounting	19" rack mountable
Power Output	<ul style="list-style-type: none"> <li>• -48 VDC via Pins (+)4/5:(-)7/8</li> <li>• Current (per port max.): 350mA @ 48VDC</li> </ul>
Power Input	AC 100~240V, 50/60 Hz, IEC power socket with fuse and power switch
Power Consumption	130 Watts Maximum
Operating Environment	0~45°C, 10~90% Relative Humidity (non-condensing)
Storage Temperature	0~70°C, 95% Relative Humidity (non-condensing)
EMI and Safety	FCC Class A, CE Mark; UL, cUL, CE/EN60950

## Specifications

### MIL-L100s

Standards	IEEE802.3af Compliant
LEDs	<b>System:</b> Power
Ports	<ul style="list-style-type: none"> <li>• (1) DATA IN RJ-45 Ethernet Port</li> <li>• (1) DATA OUT PoE Injector RJ-45 Ethernet Port</li> <li>• (1) POWER OUT JACK, 5.5x2 mm</li> </ul>
Dip Switch	5V/12V Dip switch
Cable Requirements	<b>10BASE-T:</b> 2-pair UTP/STP Cat.3,4,5 cable; EIA/TIA-568 100-ohm(100 m) <b>100BASE-TX:</b> 2-pair UTP/STP Cat.5 cable; EIA/TIA-568 100-ohm(100 m)
Weight	150g
Dimensions	<b>Width:</b> 80 mm <b>Depth:</b> 55 mm <b>Height:</b> 26 mm
Power Output	5 (default) or 12 VDC
Power Input	-48 VDC
Operating Environment	0~ 40°C , 90% Relative Humidity (non-condensing)
Storage Temperature	0~70°C, 95% Relative Humidity (non-condensing)
EMI and Safety	FCC Class B, CE Mark, CE/EN60950