

## Switch-M16PWR(PN23169A) Product Summary and Specification

### 1. Summary

Switch-M16PWR is managed ethernet switching hub with Power Over Ethernet function.

Switch-M16PWR has 16 10/100BASE-TX ports which have the IEEE 802.3af-compliant feeding power function.

Switch-M16PWR also has 2 uplink ports which have 2 extension SFP slots with 2 10/100/1000BASE-T ports.

### 2. Features

#### (1) Port 1-16

These are 10/100BASE-TX ports which support auto negotiation.

Or the speed and the communicate mode can be set by manual setting.

#### Port 1-17

These ports are 10/100/1000BASE-T ports and extension SFP slots which support auto negotiation.

These ports are combo ports. Users can choose to use SFP module or 10/100/1000BASE-T ports.

#### (2) As for port 1-16, feeding power in accordance with IEEE 802.3af is possible.

The feeding power is 15.4W or less per port.

And it is possible to feed power up to 170W in the entire equipment.

#### (3) Straight/cross cable automatic operation discrimination function is installed in all twisted pair ports.

Users can use straight cable regardless to consider the distinction between the terminal and the networking equipment.

(This function can not be used when port trunking is set.

By default, port 1-16 are set to the MDI-X setting at the factory shipment. )

#### (4) Users can connect from remote console using Telnet or Browser, and can check and change the setting of switching hub. Users can set PoE enabled/disabled from remote console for each port (port 1-16).

#### (5) By detecting the connection status, power saving mode works, and automatically stop the power supply to the port which is not connected by any device.

#### (6) Up to 256 VLAN group can be set by grouping ports using the VLAN function.

#### (7) The spanning tree protocol is supported and the system construction with redundancy is possible.

#### (8) The QoS function in accordance with IEEE802.1p is supported.

#### (9) Switch-M16PWR support IEEE802.1X user authentication function (EAP-MD5/TLS/PEAP).

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### 3. Specification

function	content
<b>Ports</b>	
Physical ports	<p>16 RJ-45 auto negotiation 10/100M PoE ports (IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE802.3af PoE) Media Type : Auto MDI/MDI-X (factory default: MDI-X) Duplex : half or full</p> <p>2 combo ports each port can be used as either an RJ-45 10/100/1000M port or as a SFP Slot</p> <p>RJ-45 Port (IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX, IEEE802.3ab 1000BASE-T Gigabit Ethernet)</p> <p>SFP Slot (for use with SFP transceivers)</p> <p>1 RJ-45 serial console port</p>
<b>Physical characteristics</b>	
Dimensions	Height: 44mm      Width: 330mm      Depth: 230mm
Weight	3,000g
<b>Mounting</b>	
brackets	<p>Mounts an EIA Standard 19 inch rack (include mounting brackets)</p> <p>Mounts a wall mount (include mounting brackets)</p>
<b>Performance</b>	
Switching capacity	14.8Gbps
MAC Address table	16K entries
Packet buffer	1Mbytes
Forwarding rate	<p>10BASE-T : Up to 14,880pps/port</p> <p>100BASE-TX : Up to 148,800pps/port</p> <p>1000BASE-T : Up to 1,488,000pps/port</p>
<b>Environment</b>	
Operating temp.	0 - 40 deg. C ( Silent fan control : High 0 - 50deg.C )
Operating humidity	20 - 80 %RH ( non condensing )
Storage temp.	-20 - 70 deg. C
Storage humidity	10 - 90 %RH ( non condensing )
<b>Electrical characteristics</b>	
Voltage	AC 100 - 240V
Current	3.5A
Maximum power rating	236W
PoE power budget	170W
Frequency	50 / 60 Hz

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Immunity	ESD : IEC61000-4-2 (10KV) Radiated : IEC61000-4-3 Level2 EFT/Burst : IEC61000-4-4 Level3 Surge : IEC61000-4-5 Level3 (AC Line) Conducted : IEC61000-4-6 Level2 Power frequency magnetic field : IEC61000-4-8 Level4 Voltage dips and interruptions : IEC61000-4-11	
Standard and protocols	<div>General protocols</div> <div> IEEE802.1D Spanning Tree  IEEE802.1w Rapid Spanning Tree  IEEE802.1p CoS Prioritization (8 priority-queuing)  IEEE802.1Q Tag VLAN (up to 256 VLANs)  IEEE802.1X Port-Based Network Access Control (EAP-MD5/TLS/PEAP)  IEEE802.3ad Link Aggregation [LACP or manual] (max.:8 port/group, 13 group/unit)  IEEE802.3x Flow Control </div> <div>Supported Agent</div> <div> RFC1157 SNMP  RFC854 Telnet  RFC783 TFTP  RFC1769 SNTP </div> <div>Supported MIB</div> <div> RFC1213 MIB II  RFC1493 Bridge-MIB  RFC1907 SNMPv2-MIB  RFC2233 IF-MIB  RFC2618 Radius-Authentication-Client-MIB  RFC2674 P-Bridge-MIB  RFC2674 Q-Bridge-MIB  RFC2819 RMON-MIB group1,2,3 and 9  RFC3621 Power-Ethernet-MIB  IEEE802.1w RSTP-MIB  IEEE802.1X IEEE8021-PAE-MIB  IEEE802.3ad IEEE8023-LAG-MIB </div>	