

Switch-M12PWR(PN23129A) Product Summary and Specification

1. Summary

The Switch-M12PWR is managed ethernet switching hub with Power Over Ethernet function.
The Switch-M12PWR has 12 10/100BASE-TX ports which have the IEEE 802.3af-compliant feeding power function.
The Switch-M12PWR also has 2 uplink ports which have 2 extension SFP slots with 2 10/100/1000BASE-T ports.

2. Features

(1) 1-12 ports

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

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

13-14 ports

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 1-12 ports, 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 no be used when port trunking is set.

By default, port 1-12 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 1-12).

(5) By detecting the connection status, power saving mode automatically works, and control and eliminate to minimum the electricity consumption to the requirement.

(6) Max 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) User authentication function (EAP-MD5/TLS/PEAP) in accordance with IEEE802.1X is supported.

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3. Specification

function	content
Ports	
Physical ports	<p>12 RJ-45 auto negotiation 10/100 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 10/100/1000 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>
Physical characteristics	
Dimensions	Height: 44mm Width: 330mm Depth: 230mm
Weight	2,900g
Mounting	
brackets	Mounts an EIA Standard 19 inch rack (include mounting brackets)
Performance	
Switching capacity	14.8Gbps
Mac Address table	16K entries
Packet buffer	1Mbytes
Forwarding rate	10BASE-T : Up to 14,880pps/port 100BASE-TX : Up to 148,800pps/port 1000BASE-T : Up to 1,488,000pps/port
Environment	
Operating temp.	0 - 40 deg. C
Operating humidity	20 - 80 %RH (non condensing)
Storage temp.	-20 - 70 deg. C
Storage humidity	10 - 90 %RH (non condensing)
Electrical characteristics	
Voltage	AC 100 - 240V
Current	3.5A
Maximum power rating	231W
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	<table border="0"> <tr> <td>General protocols</td> <td>IEEE802.1D</td> <td>Spanning Tree</td> </tr> <tr> <td></td> <td>IEEE802.1w</td> <td>Rapid Spanning Tree</td> </tr> <tr> <td></td> <td>IEEE802.1p</td> <td>CoS Prioritization (8 priority-queuing)</td> </tr> <tr> <td></td> <td>IEEE802.1Q</td> <td>Tag VLAN (up to 256 VLANs)</td> </tr> <tr> <td></td> <td>IEEE802.1X</td> <td>Port-Based Network Access Control (EAP-MD5/TLS/PEAP)</td> </tr> <tr> <td></td> <td>IEEE802.3ad</td> <td>Link Aggregation [LACP or manual] (max.:8 port/group, 7 group/unit)</td> </tr> <tr> <td></td> <td>IEEE802.3x</td> <td>Flow Control</td> </tr> <tr> <td>Supported Agent</td> <td>RFC1157</td> <td>SNMP</td> </tr> <tr> <td></td> <td>RFC854</td> <td>Telnet</td> </tr> <tr> <td></td> <td>RFC783</td> <td>TFTP</td> </tr> <tr> <td></td> <td>RFC1769</td> <td>SNTP</td> </tr> <tr> <td>Supported MIB</td> <td>RFC1213</td> <td>MIB II</td> </tr> <tr> <td></td> <td>RFC1493</td> <td>Bridge-MIB</td> </tr> <tr> <td></td> <td>RFC1907</td> <td>SNMPv2-MIB</td> </tr> <tr> <td></td> <td>RFC2233</td> <td>IF-MIB</td> </tr> <tr> <td></td> <td>RFC2618</td> <td>Radius-Authentication-Client-MIB</td> </tr> <tr> <td></td> <td>RFC2674</td> <td>P-Bridge-MIB</td> </tr> <tr> <td></td> <td>RFC2674</td> <td>Q-Bridge-MIB</td> </tr> <tr> <td></td> <td>RFC2819</td> <td>RMON-MIB group1,2,3 and 9</td> </tr> <tr> <td></td> <td>RFC3621</td> <td>Power-Ethernet-MIB</td> </tr> <tr> <td></td> <td>IEEE802.1w</td> <td>RSTP-MIB</td> </tr> <tr> <td></td> <td>IEEE802.1X</td> <td>IEEE8021-PAE-MIB</td> </tr> <tr> <td></td> <td>IEEE802.3ad</td> <td>IEEE8023-LAG-MIB</td> </tr> </table>		General protocols	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, 7 group/unit)		IEEE802.3x	Flow Control	Supported Agent	RFC1157	SNMP		RFC854	Telnet		RFC783	TFTP		RFC1769	SNTP	Supported MIB	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
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