

Product Overview



PM3012GSMI V1 is a Management ring-network industrial PoE Switch independently developed by UNIPOE. It has 12*10/100/1000Mbps adaptive RJ45 ports. 1-8 RJ45 ports support PoE power supply, with a maximum of 30W for each port. Support static routing functions, provide perfect security, QoS, and plenty of VLAN function has ring network function, can form a ring network, Switch between by hand in hand form a ring network topology, the redundancy, high reliability characteristics can make in a ring online link disconnected all the way, will not affect the forwarding of data on the network.

The device adopts no fan, low power consumption design, has the advantages of easy to use, compact and beautiful, simple installation. The product is designed to meet Ethernet standards, with lightning protection, static protection mechanism, operating temperature range of -40°C to 75°C, stable performance, safety and reliability, can be widely used in intelligent transportation, telecommunications, security, financial securities, customs and other broadband data transmission fields.

Product Features

- Complies with IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z, IEEE802.3x standards;
- PoE supports IEEE 802.3af/at standards and provides a maximum output of 30W for each port;
- Data transmission and power supply distance is 100 meters;
- Supports IEEE802.3x full-duplex flow control and Backpressure half-duplex flow control;
- Panel indicators monitor working status and assist in fault analysis;
- High energy aluminum alloy roof heat conduction groove design;
- Supports one-click ring network and one-click storm suppression, featuring redundancy and high reliability;
- High-reliability design, supporting traditional STP/RSTP layer 2 link protection technology;
- Supports manual aggregation and dynamic aggregation, which increases link bandwidth, improves link reliability, and implements load balancing and link backup;
- Flexible and convenient management and maintenance Supports various management modes, such as Console, Telnet, and SSH;
- Supports WEB management, which is simple and efficient, and facilitates installation and debugging by engineering and maintenance personnel. Supports file upload and download management through TFTP.

Product Specifications

Hardware Specification

Model	PM3012GSMI V1
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.1X, IEEE 802.1q, IEEE 802.1p, IEEE 802.1d, IEEE 802.1w, IEEE 802.3ad, IEEE802.3af, IEEE802.3at
Interface	12*10/100/1000Mbps RJ45Ports (Ports 1-8 support PoE) 1 Console Port
Indicator	PWR, LNK/ACT, PoE, SYS
Network Media	10BASE-T: UTP category 3,4,5 cable (≤100m) 100BASE-TX: UTP category 5, 5e cable (≤100m) 1000BASE-T: UTP category 5e, 5 cable (≤100m) 1000BASE-X: MMF, SMF
MAC Address Table	8K, Auto-learning, Auto-aging
Jumbo Frame	9216Byte
Packet Buffer	4.1Mbit
Transfer Mode	Store-and-forward
Packet Forward Speed	17.86Mpps
Switching Capacity	24Gbps
Dimensions(L*W*H)	145*109*62mm
Fan Quantity	Fanless
Power Supply	200W
PoE Power Budget	185W
PoE Port	Port1~8
PoE Power On RJ45	Mode A 1/2 (-) , 3/6 (+)
PoE Power Output	30W (MAX)
Green Energy Saving	IEEE 802.3az
Input Power Supply	DC: 48-57V
Operating Temperature	-40°C ~ 75 °C
Storage Temperature	-40 °C ~ 80 °C
Operating Humidity	10% ~ 90% non-condensing
Storage Humidity	5% ~ 90% non-condensing
Surge Protection	Differential mode ±2KV , Common mode ±6KV
MTBF	>100000 hour
Electrostatic Standard	Contact ±6KV, Air ±8KV

Software Specification

L2 Features	MAC Address Table	MAC Address Size	
		MAC Aging Time	
		MAC Filter	
		MAC Notification	
	Basic Management	Console/Telnet/SSH	
		Http/Https, SSL/TLS	
		FTP/TFTP	
		Syslog	
		SNMP (v1/v2c/v3), SNMP Trap	
		SNTP/NTP	
		CPU protect	
		Software/Hardware watchdog	
		Firmware Upgrade/Backup	
		Ping/Traceroute	
		Port Config	Bandwidth Control
			Flow Control
	EEE		
	MTU		
	CFM (802.1ag)		
	EFM OAM (802.3ah)		
	DDM		
	Storm Control		
	Port Isolation		
	Port Security		
	Virtual Cable Test		
	ULDP/Cisco UDLD		
	Discovery	LLDP (802.1ab)	
		LLDP-MED	
	Link Aggregation	Static	
		LACP (802.3ad)	
		Load Balance (src-mac/dst-mac/src-ip/dst-ip)	
		Max groups and ports per group	
	VLAN	VLAN (802.1Q 4K)	
		Access/Trunk/Hybrid	
		Private VLAN	
		VLAN Filter	
		MAC-based VLAN	
		Protocol-based VLAN	
		IP Subnet-based VLAN	
		Voice VLAN	
GVRP/GMRP			
QinQ/Selective-QinQ/Flexible QinQ			
VLAN Translation/N:1 VLAN Translation			
Guest VLAN			
Network Loop Detection		Loopback Detection	
	ERPS		
Spanning Tree	STP/RSTP/MSTP		
	MSTP Support 64 instance		
	BPDU Guard/Root Guard/BPDU Tunnel		
ARP	Static ARP		
	ARP Scanning Prevention		
	ARP Spoofing Prevention		
	ARP Guard		
	Gratuitous ARP		
	Dynamic ARP Inspection		

IPv4 Related Function	ICMP	ARP Quantity Control
		Anti ICMP Attack
		ICMP Rate Limit
		ICMP Unreachable Drop
	IP Forward	Static Route
		Route Aggregation
	Control Multicast	DCSCM
	Multicast VLAN	Multicast VLAN
	IGMP	IGMP SNOOPING V1/V2/V3
		Fast Leave
		IGMP Proxy
	DHCP	DHCP Server
		DHCP Client/BOOTP
		DHCP Relay
DHCP Snooping		
DHCP Option 82/43/60/61/67		
IPv6 Related Function	DHCPv6	DHCPv6 Server
		DHCPv6 Relay
		DHCPv6 Snooping
		IPv6 SAVI
		Security RA
	IPv6 Unicast Routing	Static Route
	IPv6 Multicast Routing	MLD v1/V2 Snooping
	IPv6 Features	SNMP over IPv6 Support
		HTTP over IPv6 Support
		SSH over IPv6 Support
		DNS over IPv6 Support
		IPv6 ping/traceroute Support
		IPv6 Telnet Support
		IPv6 Radius+ Support
IPv6 Tacacs+ Support		
IPv6 SNTP/NTP Support		
IPv6 FTP/TFTP Support		
IPv6 IPSec Support		
IPv6 ACL		
QoS(Quality Of Service)	Basic	Trust COS/DSCP
		Trust Port
	Scheduling	SP
		WRR
		WDRR
	PolicyMap Stream	Based on VLAN
		Based on COS/DSCP
		Aggregate PolicyMap
		Ingress PolicyMap
	Policing	CAR Stream Shaping(leak algorithm)
		Ingress Policing
	Rewrite	COS/802.1p Priority
		IP Precedence
		IPv4 DSCP/IPv6 DSCP
		Drop-precedence
		Internal-priority
		Ingress/Egress Rewrite
	Queuing	DSCP to DSCP mapping
		DSCP to DP mapping
DSCP to Queue mapping		
COS to DP mapping		

ACL	IP-ACL	COS to Queue mapping
		SIP/DIP
		IP Protocol
		IP Priority(DSCP,TOS, Precedence)
	MAC-ACL	TCP,UDP src,dst Port
		SRC/DST MAC
		VLAN
		COS
	IP-MAC ACL	Tag/Untag
	User-defined ACL	MAC-ACL and IP-ACL
	ACL Features	Based on user defined profile
		Based on time period ACL
		ACL on VLAN
Security	802.1x	Based on ACL Stream
		Port Based Authentication
		Support EAPoR
		MAC based Authentication
	MAB	Guest VLAN
		Based on Port Authentication
	MAC Address Count Limit	Based on MAC Authentication
		Based on Port
	IP Address Count Limit	Based on VLAN
		Based on Port
	Access Management	Based on VLAN
		Based on source mac and IP address
	Deny DoS Attack	TCP Flag
TCP Flagment		
IP Segment		
ICMP		
TACACS+	Standard Support	
Radius	Standard Support	
	Client, Support MD5	
SSL	Openssl 1.1.0	
Redundancy Related Function	MRPP	Compatiable ERRP
	ULPP	Uplink Protection Protocol
		Smart Link/Monitor Link
Mirror	Mirror	Uplink State Monitor
		Support one to one, multi to one
		Port based mirror, support ingress, egress, and both
		CPU based mirror
		Flow based mirror
PoE	PoE Management	RSPAN
		ON/OFF Config
		Alive Checking for PD
		7/24 On/Off Scheduling

Ordering Information

Model	Product Information
PM3012GSMI V1	8-Port Gigabit+4GE Industrial Fast Ring Managed PoE Switch