

Product Overview

PM3020GSMI V1 is a Management ring-network industrial PoE Switch independently developed by UNIPOE. It has 8*10/100/1000Mbps adaptive RJ45 ports and 12 independent Gigabit SFP fiber module expansion slots. Ports 1-8 RJ45 all support PoE power supply, each port up to 30W. 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

- Supports IEEE802.3u, IEEE802.3ab, IEEE802.3z, and 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 up to 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	PM3020GSMI 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	8*10/100/1000Mbps RJ45 Ports 12*1000Mbps SFP Slots 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	4.1M bit
Transfer Mode	Store-and-forward
Packet Forward Speed	29.76Mpps
Switching Capacity	40Gbps
Dimensions(L*W*H)	145*109*62mm
Fan Quantity	Fanless
Power Supply	200W
PoE Power Budget	180W
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
		ARP Quantity Control
IPv4 Related Function	ICMP	Anti ICMP Attack
		ICMP Rate Limit
		ICMP Unreachable Drop
	IP Forward	Static Route
		Route Aggregation
	Control Multicast	DCSCM
	Multicast VALN	Multicast VALN
	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
		COS to Queue mapping
ACL	IP-ACL	SIP/DIP
		IP Protocol
		IP Priority(DSCP,TOS, Precedence)
		TCP,UDP src,dst Port
	MAC-ACL	SRC/DST MAC
		VLAN
		COS
		Tag/Untag
	IP-MAC ACL	MAC-ACL and IP-ACL
	User-defined ACL	Based on user-defined profile
ACL Features	Based on time period ACL	
	ACL on VLAN	
	Based on ACL Stream	
Security	802.1x	Port Based Authentication
		Support EAPoR
		MAC based Authentication
		Guest VLAN
	MAB	Based on Port Authentication
		Based on MAC Authentication
	MAC Address Count Limit	Based on Port
		Based on VLAN
	IP Address Count Limit	Based on Port
		Based on VLAN
	Access Management	Based on source mac and IP address
	Deny DoS Attack	TCP Flag
		TCP Fragment
		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
ULSM	Uplink State Monitor	
Mirror	Mirror	Support one-to-one, multi to one
		Port based mirror, support ingress, egress, and both
		CPU based mirror
		Flow based mirror
		RSPAN
PoE	PoE Management	ON/OFF Config
		Alive Checking for PD
		7/24 On/Off Scheduling

Ordering Information

Model	Product Information
PM3020GSMI V1	8-Port Gigabit + 12G SFP Industrial Fast Ring Managed PoE Switch