

Product Overview



PM9020GSMI V1 is an industrial Managed PoE Switch independently developed by UNIPOE. It provides 8*10/100/1000Mbps adaptive RJ45 ports and 12*1000Mbps SFP fiber module expansion slots. 1-8 RJ45 ports all support PoE power supply, a single port up to 90W. 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 storage and forwarding, 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/bt standards and provides a maximum output of 90W 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/MSTP/RSTP layer 2 link protection technology;
- Support static convergence and dynamic convergence (LACP) 2 convergence modes, effectively increase the link bandwidth, improve the reliability of the link, and at the same time can achieve load balancing, 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	PM9020GSMI 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, IEEE802.3bt
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-updating
Jumbo Frame	9216Bytes
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(+) Mode B 4/5(+), 7/8(-)
PoE Power Output	90W(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	5% ~ 95% non-condensing
Storage Humidity	0% ~ 95% 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
	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-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 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	

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 Fragment
		IP Segment
		ICMP
TACACS+	Standard Support	
Radius	Standard Support	
	Client, Support MD5	
SSL	Openssl 1.1.0	
Redundancy Related Function	MRPP	Compatible 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
PM9020GSMI V1	8-Port Gigabit +12G SFP Industrial Fast Ring Managed High PoE Switch(1-8 Port Support IEEE 802.3 Bt)