## Prism MS28P24 PoE Managed Switch 24埠L3高速乙太網路PoE交換器



## **Highlights**

- ✓ 標準一體式19吋機架式1U
- ✓ 具備24個RJ45自動調速10/100/1000Base TX 連接埠(符合IEEE802.3、IEEE802.3u、IEEE802.3ab、IEEE802.3z) + 4 個10G SFP 連接埠及1個RJ45 Console。
- ✓ 內建記憶體提供64MB快閃記憶體(Flash Memory)及256MB SDRAM。
- ★ 整體背板頻寬(Backplane Capacity)可達256Gbps(含)以上,整體交換效能(Throughput)可達92.32Mpps(含)以上。
- ✓ 提供容量達 16,000個(含)以上之MAC位址表。
- ✓ 具備擴充樹協議(Spanning Tree): IEEE802.1D(STP)、IEEE802.1W(RSTP)、IEEE802.1s(MSTP)。
- ✓ 提供4096個虛擬區域網路且支援IEEE802.1Q Port based VLAN、MAC based VLAN、IP-based VLAN、Protocolbased VLAN、Voice VLAN



- ✓ 具備802.3ad link aggregation (LACP) StaticTrunk,可達設定至少32個群組、每個群組8埠
- ✓ 支援IGMP Snooping v1/v2/v3 Proxy Snooping Immediate Leave
- ✓ 支援Layer 3 IPv4 Static Route 功能。
- ✓ 提供Policy QoS 功能,每交換埠具備8組(含)以上硬體Priority queue 之能力,可依據802.1p、DSCP等參數設定優先權。
- ✓ 援packets mapping to queue、COS or DSCP Remarking、Rate limits of data flow、Data flow statistics、Mirroring of data flow
- ✓ 每埠可依Layer 2/3做分類層級化可設定頻寬(Rate Limiting),並依實際需求設定Ingress頻寬。
- ✓ 支援Port Mirroring
- ✓ 具備16K(含)以上Jumbo Frame。
- ✓ 支援廣播風暴控制(Broadcast storm Control)。
- ✓ 支援IEEE802.3x 流量控制(Flow Control)。
- ✓ 支援IEEE802.1x RADIUS認證動態連接埠身份驗證協定。
- ✓ 支援存取控管L2/3 ACL。
- ✓ 支援IEEE 802.3 af/at, PoE最高輸出瓦數400W。
- ✓ 支援PoE Timer定時/日/週期開關功能。
- ✓ 提供Spanning Tree Loopback detection網路迴圈偵測。
- ✓ 支援IP Source Guard、DHCP Snooping。
- ✓ 具備Dynamic ARP Inspection(DAI)功能。
- ✓ 支援指令管理(CLI)及網頁(WEB)管理SSH(v1.5/v2.0)。
- ✓ 支援網路探測協定LLDP(802.1ab)、LLDP-MED。
- ✓ 具備SNMPv1/v2及4組(含)以上RMON、Port Mirroring功能,且具備Console、Telnet及HTTP Web Management網管進行參數設定與更新。
- ✓ 具備Memory Flash Log、Event/Error Log/Syslog 記錄及SNTP網路時間校正功能。
- ✓ 操作温度:-20~+55°C內建記憶體提供16MB快閃記憶體(Flash Memory)及128MB DDR3 RAM
- ✓ 整體背板頻寬(Backplane Capacity)可達128Gbps,整體交換效能(Forwarding Rate)可達40.32Mpps。
- ✓ 提供容量達 8,000個MAC位址表。
- ✓ 具備擴充樹協議(Spanning Tree): IEEE802.1D(STP)、IEEE802.1W(RSTP)、IEEE802.1s(MSTP)。
- ✓ 提供4096個虛擬區域網路目支援IEEE802.1Q Port based VLAN、Voice VLAN
- ✓ 具備802.3ad link aggregation (LACP) StaticTrunk,可達設定最多8個群組。
- ✓ 支援IGMP Snooping v1/v2/v3 Proxy Snooping Immediate Leave
- ✓ 提供Policy QoS 功能,每交換埠具備硬體Priority queue 之能力,可依據802.1p、DSCP等參數設定優先權。
- ✓ 支援COS、Mirroring of data flow
- ✓ 支援Port Mirroring



- ✓ 具備9000 Jumbo Frame。
- ✓ 支援廣播風暴控制(Broadcast storm Control)。
- ✓ 支援IEEE802.3x流量控制(Flow Control)。
- ✓ 支援IEEE802.1x RADIUS認證動態連接埠身份驗證協定。
- ✓ 支援存取控管L2 ACL。
- ✓ 支援IEEE 802.3af/at, PoE最高輸出瓦數400W。
- ✓ 支援PoE Timer定時/日/週期開關功能。
- ✓ 提供Spanning Tree Loopback detection網路迴圈偵測。
- ✓ 支援DHCP Snooping。
- ✓ 支援指令管理(CLI)及網頁(WEB)管理SSH(v1/v2)。
- ✓ 支援網路探測協定LLDP(802.1ab)、LLDP-MED。
- ✓ 具備SNMP v1/v2/v3及RMON v1/v2、Port Mirroring功能,且具備Console、Telnet及HTTP Web Management網管進行參數設定與更新。
- ✓ 具備Memory Flash Log、Event/Error Log/Syslog 記錄及SNTP網路時間校正功能。
- ✓ 操作温度:-20~+55°C

## Prism MS28P24 24埠L3高速乙太網路PoE交換器完整規格表

Model	MS24 L3 24 port Switch
Fixed Port	24*10/100/1000Base-TX 4*10G SFP+
PoE Port	1-2 port supports PoE IEEE 802.3af/at/poe++/BT 3-24 port supports PoE IEEE 802.3af/at
PoE type	IEEE802.3af/at
Console Port	1*console port
Reset Key	1
CPU	400MHz ARM® Cortex™-A9
DDR	2G DDR3 1333MHz
Buffer	Fully integrated 1.5 MB packet buffer
FLASH	64M
RAM	256M
Bandwidth	256Gbps
Packet Forwarding	92.32Mpps
MAC Address	16K
Network Protocol	IEEE 802.3 IEEE 802.3u 100BASE-TX

	IEEE 802.3ab1000BASE-T	
	IEEE 802.3x IEEE 802.3z 1000BASE-X	
	IEEE 802.3af/at	
	IEEE 802.3ad	
	IEEE 802.3q 、IEEE 802.3q/p	
	IEEE 802.1w、IEEE 802.1d 、IEEE 802.1S	
	STP (Spanning Tree Protocol)	
	RSTP/MSTP (Rapid Spanning Tree Protocol)	
	EPPS ring network protocol	
Dowt Considiration	EAPS ring network protocol 10/100/1000BaseT (X) Auto	
Port Specification		
Transmission Mode	Store and Forward (full wirespeed)	
Transmission Distance	10BASE-T: Cat3,4,5 UTP (≤250 meter) 100BASE-TX: Cat5 or later UTP (≤100 meter)	
Transmission distance	1000BASE-TX: Cat6 or later UTP (<1000 meter)	
	`	
	PWR: Power LED SYS:(System LED)	
LED Indicator	1~24:(Link LED=10/100M Link、1000M=Gigabit Link)	
LED Illuicator	1~24:(PoE LED=PoE on)	
	25 26: (SFP LED)	
	Built-in power AC 100~240V 50/60HZ MAX	
Power	Max Current 4.8A	
	Max Power 400W	
Operating		
Temperature/Humidit	-20 ~ +55°C; 5% ~ 90% RH Non coagulation	
y Storage		
Temperature/Humidit	-40 ~ +75°C; 5% ~ 95% RH Non coagulation	
y	10 1/0 0/0/0/0/10 Then coagaination	
Physical size	roduct size: 440mm*290mm*45mm	
-	Packing size: 515mm*375mm*95mm	
N.W/G.W ( kg )	3.5kg/4.3kg	
Installation type	1U Rack type, 19 "	
Lightning protection level	3KV 8/20us IP30	
ievei	CE mark, commercial; CE/LVD EN60950;	
Certificate		
	FCC Part 15 Class B; RoHS;	
Warranty	Whole device for 1 year (Accessories not included)	
Features	L3 Switch	
Port		
Number of Copper Gig ports	gabit 24-48	
Number of Fiber 10G or	r 1G 4	
ports		
Port Shutdown	Support	
Port Speed	Support autonegtiate, full-1000, full-100, half-100, full-10, half-10	
Flow Control	support full-duplex IEEE 802.3x, half-duplex back pressure	
Storm Control	Supports rate limit for broadcast, multicast, and DLF packets	
Storm Constrain	Support the detection of broadcast packets, multicast packets,	
	or unicast packets on the port, shutdown the port if the rate is over the threshold.	
Port Mirror	Support	
Port Rate Limit	Support port ingress and egress rate limit	
Link Aggregation	Support MACD dynamic link aggregation	
	Support LACP dynamic link aggregation Supports up to 32 aggregation groups, each group up to 8 ports	
	Supports up to 32 aggregation groups, each group up to 6 polts	



	Support source MAC, destination MAC, source destination MAC, source IP, destination IP, source
	destination IP routing strategy
Port Isolate	Support
Jumbo Frame	Support up to 16KB packet
Redundant Port	Support
MAC	
MAC Table Capacity	16K
MAC Table Management	Support
Forwarding mode	Support IVL forwarding mode
Static MAC Address	Support
MAC Address Binding	Support
MAC Address Filtering	Support
MAC Learning Control	Control the MAC learning based on port
VLAN	
Number of VLANs	4K
802.1q-based VLAN	Support
MAC-based VLAN	Support
IP-based VLAN	Support
Protocol-based VLAN	Support
Voice VLAN	Support
VLAN Mapping	Support 1:1 mapping
QinQ	Support basic QinQ
	Support flexible QinQ
Reliability	
Spanning Tree Protocol	Support STP/RSTP/MSTP
Port Loop Detection	Support
EAPS	Support
ERPS	Support G.8032/Y.1344
LLDP	Support LLDP & LLDP-MED
UDLD	Fully compatible with CISCO's UDLD protocol
VLLP (VRRP Layer-2 Loop	Support, only used with VRRP
Protection) L3	
	Compart static and demands ADD
ARP	Support static and dynamic ARP
Static Route	Support 22 M AN interference
VLAN Interface	Support 32 VLAN interfaces
RIP	Support RIP v1/v2
OSPF	Support OSPFv2
Policy Route	Support
VRRP	Support
Multicast	
Static Multicast MAC Address	Support
IGMP SNOOPING	Support IGMP SNOOPING v1/v2/v3
	Support IGMP Querier Support IGMP SNOOPING Filter
MVD	
MVR GMRP	Support
	Support
ACL Standard ID based ACL	Cumout
Standard IP-based ACL	Support
Extended IP based ACL	Support
MAC APP L LACK	Support
MAC ARP-based ACL	Support
ACL Port Filtering	Support
Time-based ACL	Support
QoS	

Port Queue Number	8
Port Queue Scheduling Mode	Support WRR, RR, WDRR, SP
Port-based Classification	Support
802.1p-based Classification	Support
DSCP-based Classification	Support
ACL-based Classification	Support
QoS Policy	Support packets mapping to queue
Q03 Folicy	Support COS or DSCP Remarking
	Support rate limits of data flow
	Support data flow statistics
	Support mirroring of data flow
DHCP	, ,,
DHCP Client	Support
DHCP Snooping	Support
DHCP Relay	Support
DHCP Server	Support
DHCP option 82	Support
Management	1 11
CLI Management	Support Console, Telnet and SSH
WEB Management	Support HTTP and HTTPS
SNMP Management	Support SNMP v1, v2c
Simil Famagement	Support SNMP TRAP
	Support lots of standard and private MIBs
User Management	Support multiple user management
Log Management	Support local log management
	Support SYSLOG
RMON	Support RMON 1, 2, 3 and 9 groups
Cluster Management	Support NDP
	Support NTDP
	Support manual and automatic joining of cluster groups Support cluster unified management
Configuration File	Support uploading and downloading configuration file
Upgrade software	Support aproducing and derimedating configuration inc
Clock Management	Support local clock management
Glock Planagement	Support SNTP
Security	
Switch Management Security	Support enabling and disabling TELNET, WEB and SNMP services
	Support TELNET, WEB and SNMP services to bind to standard IP ACLs
	Support for limiting the number of TELNET connections
CPU Protection	The switch's own security protection prevents large data streams from attacking the switch itself.
AAA	Support 802.1x Support RADIUS
	Support RADIUS Supports authentication, authorization, and accounting through RADIUS server
	Support port-based and MAC-based 802.1x
	Support 802.1x guest VLAN
IP MAC Binding	Support static configuration of IP, MAC and port binding
DHCP SNOOPING	Support dynamic ARP binding to prevent ARP spoofing
	Support dynamic IP, MAC and port binding
	Support fixed port to connect to DHCP server to prevent private connection to DHCP server
Prevent ARP Spoofing	Support manually configuring MAC ARP-based ACL rules to prevent ARP spoofing.
	Support the DHCP SNOOPING function. During the process of obtaining an IP address by DHCP, the switch dynamically binds ARP to the port to prevent ARP spoofing.
POE	Switch dynamicany binds Ard to the port to prevent Ard spooning.
	Support DOE powering of ports on and off
Switch Control Power Control	Support POE powering of ports on and off
	Support setting total power
Other Advanced Features	Support POE scheduling policy and PD online query, etc.
Debugging	



PING	Support
TRACEROUTE	Support
TELNET Client	Support