machpower®

DATASHEET

FULL GIGABIT L2 MANAGED SWITCHES

MODEL: SW-MG24L2F-005

DESCRIPTION

The SW-MG24L2F-005 series are L2 gigabit Ethernet Switches developed by Mach Power. Except for excellent non-blocking line-speed data switching, the series support diversified service features as well. The switches supports easy-to-use Web management and comprehensive security policies, which enable to establish high security and easy-managed access network environments in government networks, campus networks, enterprise networks and other public networks.

FEATURES

Non-blocking High-speed Forwarding

Support L2 level wire-speed port switching, which enables all ports to forward packets without blocking.

High Speed and Efficiency Ring Protection

Real-time Monitoring: Built-in configuration-free ring protection, can provide real-time monitoring and find the network rings without delay.

Quick Alarm: The built-in buzzer quickly alarm when a ring is found , to warn the network administrator of ring problems.

Precise Localization: The ring problem interface indicator will flash slowly and periodically to help the network administrator precisely localize the ring port without any delay.

Intelligent Blocking: The switch can automatically block ring port when detect a ring problem, which can efficiently avoid broadcast storm caused by ring problem and secure the normal network communication.

Auto-recovery: After the ring problem is removed, the network will recover automatically, the buzzer stop alarming and ring port back to normal work.

Comprehensive Security Control Policies

Support link aggregation to enhance the network bandwidth and defend the network security with link backup.

Support multiple spanning tree protocols: STP, RSTP,MSTP ,provide rapid convergence and improved fault-tolerant capacity. The network sable operation and load balance are well guaranteed, also improved the reasonable use of network channels and redundant link; Support the binding of user access interface, IP addresses and MAC addresses, to defend against inner network ARP attacks and Dos attacks. Support attacks defence strategies, against for Land attacks, Blat attacks, Ping attacks, TCL controled flag attacks. Support IEEE 802.1x port authentication, process security authentication for access users. Support storm suppresstion based on bandwidth adjustment, storm flitering and ACL strategie.

Support the Back-pressure traffic control under Half-Duplex mode and IEEE 802.3x traffic control under Full-Duplex mode. The heavy traffic data peak can be switched stably without the concern of network paralysis caused by overload.

Convenient and Quick Management and Maintenance

Adopt simple visual Web-based interface, which helps users to handle various functions easily and conveniently. Support Simple Network Management Protocol (SNMP) that the devices are convenient to configure and manage. Small and medium-sized enterprise customers can centralized manage the switch easily.

Support CLI command line management, suitable for professional network administrators. Support Port Mirror Function, can monitor the ingress, egress or bi-direction packets. Support resetting to factory defaults, make the maintenance more easily.

Innovative Energy Saving Design, the leader of low-carbon communication

Supports IEEE 802.3az(Energy Efficient Ethernet), port energy detection, CPU variable-frequency and device hibernate technology, greatly reducing energy consumption and noise without compromising performance and stability

SPECIFICATION

Service Ports	24 x 10/100/1000 Base-T
	2 x 1000 Base-X SFP slots independent
Management Port	1 x Console port
Switching Capacity	≥52Gbps
Packet Forwarding Capacity	36Gbps
Operation Temperature	-20~50°C
Storage Temperature	-40~70°C
Operation Humidity	10%~90%(non-condensing)
Storage Humidity	5%~95%(non-condensing)
Dimensions	440 (L) x 285(W) x 44.5(H) mm
Weight	<4Kg
Input Voltage(AC)	AC: 90~264V/50~60Hz
Power Consumption	<30W
Protocol and Standards	IEEE 802.3, 10 Base-T Ethernet;
	IEEE 802.3ad, Static or Dynamic Link Aggregation;
	IEEE 802.3u,100 BASE-TX;
	IEEE 802.3az,EEE(Energy Efficient Ethernet)
	IEEE 802.3ab,1000 BASE-T;
	IEEE 802.3z,1000 BASE-X;
	IEEE 802.3x,Full-Duplex Flow Control;
	IEEE 802.1q,VLAN;
	IEEE 802.1p,QoS/CoS;
	IEEE 802.1d, Spanning Tree Protocol;
	IEEE 802.1s, Multiple Spanning Tree Protocols;
	IEEE 802.1w, Rapid Spanning Tree Protocol;
MAC Address	8K MAC addresses
	Support auto-update, two-way learning
VLAN	Maximum 4K VLANs
	Port-based/Protocol-based/ACL-based VLANs
	VLANs based on IEEE 802.1q

Spanning Tree	STP Spanning Tree Protocol
	RSTP Rapid Spanning Tree Protocol
	MSTP multiple Spanning Tree Protocol
Port Aggregation	8 aggregation groups,each containing up to 8 ports;
	Static aggregation and dynamic aggregation;
Port Mirroring	Many-to-one mirroring (that is, multiple mirroring ports and 1 monitor port)
Port Isolation	Isolation between downlink ports without influence the communication
	between downlink and uplink ports
Ring Protection	Ring Protection, real-time detecting, quick alarm,precise localization,
	smart blocking and auto-recovery
Traffic Control	Back-pressure traffic control under Half-Duplex mode
	IEEE 802.3x traffic control under Full-Duplex mode
Flow Rate Limitation	Port-based ingress or egress rate limiting
Multicast	IGMP v1/2/3 and MLD v1/2 snooping
Storm Suppression	Strom suppression for unknown unicast,multicast, unknown multicast
	and broadcast types.
	Support storm suppresstion based on bandwidth adjustment, storm
	flitering and ACL strategie.
Security	Support ACL(access control list), maximum 1500
	Support attacks defence strategies, against for Land attacks, Blat attacks,
	Ping attacks, TCL controled flag attacks.
	Support authentication based on user port, IP address and MAC address.
	Port-based security control for MAC address quantity
	802x1 port authentication
QOS	SP (Strict Priority)
	WFQ (Weighted Fair Queuing)
	WRR (Weighted Round Robin)
	Random Early Detect(RED)
	WeightedRandomEarlyDetection (WRED)
	Head Of Line
	802.1p (Port Queuing Priority)
	DSCP Priority(Differentiated Service Code Point)

Negotiation pattern	Auto-negotiation
Cable Feature	Auto-MDIX
Configuration & Management	Detect the connectivity of cables
	Uploading or downloading of the configuration data
	Uploading of upgrade patch
	Look up system logs
	WEB-based reset to factory defaults
	WEB-based interface management;
	CLI interface management;