



The Gigabit Smart Managed Switch is equipped with 24 gigabit RJ45 ports. The switch supports high perfor-mance, enterprise-level security control & QoS Layer 2 management features. It is a cost-effective product solution for the small and medium business.

The switch supports the WebGUI to control each port status and bandwidth control by port rate limiting. The Storm Control feature protects against Broadcast, Multicast and Unicast Storm. The rich Quality of Service (QoS) & VLAN provides enhanced traffic management capabilities to move your data smoother and faster. The device supports a complete lineup of layer 2 features, including 802.1Q tag VLAN, Port Isolation, Port Mirroring, STP/RSTP, Link Aggregation Group and 802.3x Flow Control function. It also supports SNMP man- agement functions.

The switch complies with IEEE802.3az Energy Efficient Ethernet to save power consumption, Support IGMP Snooping function to improve traffic performance. Moreover, the rich diagnostic LEDs on the front-panel provide the operating status of individual port and whole system.

#### ShareTech ML-9324E Network Switch functions

- Cost-effective, applicable for small offices and SOHOs
- Supports 19 inches rack mounting for cabinets or inside the house
- Plug-in and easy installation
- Adopts all-steel chassis without fan, stable operation and excellent heat dissipation
- Equipped with LED indicators for easy identification of network status
- Integrated with ShareTech Firewall switching topology
- Compatible with ShareTech Firewall to minimize ransomware attacks

### Port management

This switch supports auto-detection of 10/100/1000 Mbps speeds, allows backward compatibility with IEEE802.3 High-Speed ethernet, IEEE802.3u High-Speed ethernet, and IEEE802.3ab Ultra-High-Speed ethernet devices for increasing network transmission flexibility, and controlling whether each port is turned on or off. Each port can be selected from 10Mbps, 100Mbps, or 1000Mbps network speed; full duplex or half duplex mode. It also supports Port Trunk, which combines bandwidth for maximum performance.

#### **VLAN** function

ML-9324E features the function of Port Base VLAN and Tag Base VLAN, which can easily separate each port and make each of them to be a network segment in order to limit broadcast storm(packet) interference, preventing NetCut interfering and enhancing data security. It also prevents the spread of viruses, making it more suitable for enterprise intranets or student dormitories.

#### QOS

The requirements for users of Giga port Switch are not only improving the networks, but also effectively manage network bandwidth. There are two ways to utilize the bandwidth properly. One is to use QoS limitation for normal packets, and the other is to limit the number of broadcasts of abnormal packets.

ML-9324E allows users to set policy QoS parameters based on bandwidth requirements, and each port is equipped with 4 or more Port Priorities (low, normal, medium, high) to provide high-quality and high-performance network.

#### **Mirror Port**

Mirror Port is also known as Sniffer Port, this feature must be activated if the network administrator wants to monitor real-time network traffic, user web logs, website usage, or website health analysis.

#### **Packet Filtering**

The ML-9324E has a pocket filtering feature to control broadcast packets and multicast packets, which can be disabled if there are too many broadcast packets. Multicast is used to transmit overloaded data with a small amount of bandwidth to reduce the load of related network device. For example, if a data packet of about 500kb is sent to four users at the same time, the user machine at the sending end requires 2Mb of upload bandwidth to accomplish this task. Such a bandwidth requirement is inconvenient for the current network environment in Taiwan, and multicast can be used to solve this problem.

## Combined with ShareTech Firewall to show the network topology

In combination with the ShareTech Firewall (Switch Management), the GUI displays the PORT of each switch under each IP address, giving the user an overview of the real structure of internal network, e.g. which switches are connected to each other. At this point, matching up with address table management image of the firewall, network management is no longer just a virtual management of IP addresses. Which switch PORT each IP is connected to, whether you can change the IP address on your own or not, every management action is "seeing is believing".

#### Reduce intranet ransomware attacks

The most difficult types of attacks to detect in intranet security protection are broadcast pockets, such as ARP spoofing and private DHCP servers. These types of attacks are difficult to detect due to flaws in the protocol itself. On the other hand, if internal PCs are implanted with malware, lurking or infiltrated internally, as long as the firewall is enabled to protect the switch, the IPs and MACs of the computers can be blocked directly when malicious behaviors or traffic are detected, when malicious behaviors or traffic are detected, the IPs and MACs of the computers can be blocked directly to provide an advanced intranet protection mechanism to protect the security of the internal network.

#### **Statistics Overview**

The Statistics Overview feature allows network administrators to monitor traffic on the intranet. When high traffic values are detected, real-time traffic monitoring, network logs and network health analysis can be used to know what services and logs are being used by users, thus getting a first-hand understanding of intranet security.

# Advanced and affinity hardware designs

- Advanced hardware design
- Fanless design: suitable for open environments without fan noise interference
- Affordable hardware design
- Each port has an LED status indicator: easy to realize the status of each port

## **Easy installation**

Plug and Play: pre-configured file that allows for easy installation

# PRODUCT SPECIFICATIONS

Hardware	
Ports	24*10/100/1000 Mbps RJ-45
Interface	1*Power LED(Green)
	1*System LED(Green)
	24*port LEDs(Link/Act:Green)
	Flash:16MB
Memory	DDR2 : 128MB
Reset	Yes
Power Supply	12V/1.67A,AC
	Power input(100V~240V,47~63Hz)
Platform Size	Desktop
power switch	ON / OFF
Capacity	
MAC Address Table	8K
Backplane	48Gbps
Buffer Memory	524.8K bytes
Jumbo Frames	10K bytes
Forwarding Rate	35,700,000(m/s)
	14880pps at 10Mbps,
Switching Capability	148810pps at 100Mbps
	1488095pps at 1Gbps with 64bytes packets,
Software	2 100033 pps at 200ps with 0 10 yets packets,
Standard	IEEE802.3 \ IEEE802.3u \ IEEE802.3az \ IEEE802.3x \ IEEE 802.1p
Flow control	Yes
Spanning Tree	IEEE 802.1D(STD)
	IEEE802.1w(RSTP)
	Auto Edge Port
	Self Loop Detection
VLAN	64 Static VLAN
	Port-based
	IEEE 802.1Q Tagged Based
Packet filter	Yes
Port Mirror	Yes
QoS	Yes
Storm Control	Yes
HTTPS and SSL 2.0(Web防護)	Yes
Account management	Yes
IPv6 Host	Yes
IPv6 Application	HTTP / HTTPS / TELNET / SNMP / TFTP / PING / DHCPv6
Command	Console / Telnet
Web-UI	HTTP / HTTPS
SNMP	V1/v2c
DHCP	Client
DNS	Client
Environment	Cheff
<u> </u>	Operating: 0°C ~ 50°C (32°~122°F);
Operating Temperature	Storage: -40°C ~ 70°C (-40°~158°F)
Operating Humidity	Operating: 10% ~ 95% RH, non-condensing
Dimension	267*162*42
Emission & Safety	
Lillission & salety	EMC/FCC, CE Class A; Safety/LVD EN60950-1