

## MAG6246

### Managed 24-Port Gigabit Network Switch



#### Description

The Managed 24-Port Gigabit Network Switch is equipped with 28 Gigabit 10/100/1000 Mbps Ethernet ports and 4 Gigabit SFP fiber combo slots. It delivers a 256 Gbps switching capacity and a forwarding performance of 72 Mpps. This managed 24-port Gigabit network switch provides simple and convenient installation and maintenance, along with a rich set of features, helping users build a secure, reliable, and high-performance network. It is widely used in SMEs, Internet cafés, hotels, factories, industrial parks, schools, and other network surveillance and wireless coverage scenarios.

The switch supports Layer 2 network management functions, including link aggregation, comprehensive security protection mechanisms, advanced ACL/QoS policies, and rich VLAN capabilities, making it easy to manage and maintain. It supports multiple network redundancy protocols, including STP/RSTP/MSTP (<50 ms), improving link backup and network reliability. In the event of a unidirectional network failure, it can quickly restore communication, ensuring uninterrupted transmission of critical data. The managed 24-port network switch supports flexible operation and maintenance management through multiple methods such as Web, CLI, SNMP, and Telnet. It also supports port traffic control, VLAN segmentation, QoS configuration, and various application services.

With its powerful data processing capability and professional, flexible, durable, and stable performance, this managed 24-port network switch adapts to a wide range of networking scenarios. The combination of Gigabit Ethernet ports and fiber uplink ports meets the growing demand for big data transmission, making it a preferred choice for both small-to-medium projects and edge deployment in large-scale systems.

#### Features

- Exceptional big data processing capacity for smooth experience: The managed switch adopts an industry-leading high-capacity buffer and high-efficiency switching chipset. It supports IEEE 802.3x intelligent flow control, non-blocking high-performance forwarding, high backplane bandwidth, and wire-speed forwarding, delivering up to 95% throughput. This enables strong data handling capability

for large-scale data transmission, ensuring that demanding HD surveillance applications are fully supported. The ultra-large buffer effectively prevents packet loss caused by sudden traffic bursts that exceed the switch's processing capability, thereby avoiding video freezing or frame drops.

- **Powerful service and management capabilities:** The managed 24-Port Gigabit network switch supports IEEE 802.1Q VLAN and protocol-based VLAN, allowing flexible network segmentation based on user requirements. It supports QoS with three priority modes (port-based, 802.1P-based, and DSCP-based) and four queue scheduling algorithms: SP, WRR, SP+WRR, and EQ. It also supports ACL (Access Control List), enabling flexible security policies through rule matching, action control, and time-based permissions for packet filtering. IGMP v1/v2 multicast protocols and IGMP Snooping are supported to meet the requirements of multi-terminal HD video surveillance and video conferencing applications. The switch supports both static and dynamic link aggregation, effectively increasing bandwidth, enabling load balancing and link redundancy, and improving overall link reliability.
- **Comprehensive security protection mechanisms:** The switch supports IEEE 802.1X authentication, providing LAN user authentication and controlling port authorization based on authentication results. It supports port isolation and broadcast storm suppression. It also supports port + MAC binding and IP + MAC + port binding, enhancing network security and access control.
- **Easy operation and maintenance management:** Multiple management methods are supported, including Web GUI, CLI (Console and Telnet), SNMP (v1/v2/v3), and Telnet. Secure management is ensured through encryption protocols such as HTTPS, SSLv3, and SSH v1/v2. It supports RMON, system logs, and port traffic statistics for network optimization and troubleshooting. LLDP is supported for easy topology discovery and link status monitoring in network management systems. The switch also supports CPU monitoring, memory monitoring, ping diagnostics, and cable length detection for efficient maintenance and troubleshooting.

## Specifications

Model	MAG6246
Downlink Ports	28 × 10/100/1000 Mbps RJ45 ports
Uplink Ports	4 × Gigabit SFP fiber combo slots
Management Port	1 × Console port
Switching Capacity	256 Gbps
Forwarding Rate	72 Mpps
MAC Address Table	16K MAC address entries (dynamic/static) Automatic MAC learning and aging; bidirectional learning supported
Standards & Protocols	IEEE 802.3i 10Base-TX; IEEE 802.3u 100Base-TX; IEEE 802.3ab/z 1000Base-TX; IEEE 802.3x Flow Control; IEEE 802.3af DTE Power via MDI; IEEE 802.3at DTE Power via MDI; ANSI/IEEE802.3N-Wa; IEC61000-4-2(ESD)15KV(air), 8KV(contanc).
VLAN	Up to 4096 VLANs supported Port-based VLAN IEEE 802.1Q VLAN tagging MAC-based VLAN Protocol-based VLAN

Spanning Tree Protocol	STP (Spanning Tree Protocol) RSTP (Rapid Spanning Tree Protocol) MSTP (Multiple Spanning Tree Protocol)
Link Aggregation	Up to 14 aggregation groups, up to 16 ports per group Supports static and dynamic link aggregation
Port Mirroring	Many-to-one port mirroring, no limitation on number of source ports
Flow Control	Half-duplex backpressure flow control Full-duplex IEEE 802.3x PAUSE frame control
Bandwidth Control	Ingress/Egress bandwidth control per port
Multicast Control	IGMP Snooping MVR (Multicast VLAN Registration) MLD Snooping
DHCP Features	DHCP Client, DHCP Server, DHCP Snooping, DHCP Relay
Storm Control	Broadcast storm suppression, Multicast storm suppression, Unicast storm suppression
QoS	SP (Strict Priority scheduling) WFQ (Weighted Fair Queuing) WRR (Weighted Round Robin) RED (Random Early Detection) WRED (Weighted Random Early Detection) HOL (Head-of-Line blocking prevention) Best Effort service First Come First Served (FCFS) 802.1p priority queuing DSCP / ToS QoS marking Differentiated Services (DiffServ)
Security Features	Hardware-based ACL (IP ACL / MAC ACL / VLAN ACL) Layer 3/4 ACL support Port-based IP + MAC binding ARP Detection IEEE 802.1X port authentication
Lightning Protection	IEC 61000-4-2 ESD protection: ±15KV (air), ±8KV (contact), supports 8/20µs surge protection up to 24A (12A condition)
System Maintenance	Configuration backup/restore, Firmware upgrade support, Web-based factory reset, System log (Syslog), Ping diagnostics
Network Management	Web management (HTTP / HTTPS), CLI management, Telnet remote access, SSH v2.0, SNMP management (v1/v2/v3), RMON, LLDP
Environmental Requirements	Operating temperature: -10°C ~ +55°C Operating humidity: 10% ~ 90% (non-condensing)
Power Supply	Rated input: 100–240V AC, 50/60Hz Operating range: 90–264V AC, 50/60Hz
Product Dimensions (W × D × H)	440 × 190 × 44.5 mm
Package Dimensions	540 × 235 × 80 mm
Net Weight	1.37 kg
Gross Weight	2.57 kg

# Front / Rear Panel

