



## JMG-24F4

### Features

#### High Performance Network Switching Technology

- ✓ Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.1p, IEEE 802.1q, IEEE 802.1d, IEEE 802.1w, IEEE 802.3a, IEEE 802.3ab, IEEE 802.1x, IEEE 802.1v
- ✓ Provides 24 x 10/100/1000 Mbps Ethernet ports with RJ-45 connector
- ✓ Provides 4 combo ports
- ✓ RJ-45 Port support auto MDI/MDI-X crossover
- ✓ Provides broadcast storm protection
- ✓ IGMP snooping for multicast traffic
- ✓ QoS / ToS to increase network packet determinism
- ✓ VLAN for easy network planning
- ✓ Port trunking with flexible load distribution control and fail-over function
- ✓ Supports IP security
- ✓ Supports Web/ SNMP / Telnet / CLI management

#### Robust Industrial Design

- ✓ Metal case complying to IP-20 housing standard
  - ✓ Rack mount or desktop installation
- #### Reliable Power Design
- ✓ Power input of AC 100 to 240V, 50 /60Hz



### Overview

The Jaguar Series JMG-24F4 is a high performance, Web-managed switch that offers a reliable connection to the network backbone and can interconnect a number of workgroup users in a typical network environment. It has twenty four 10/100/1000TX RJ-45 ports and four small form pluggable (SFP) ports that supports Gigabit SX or LC depending on your existing network structure. JMG-24F4 provides powerful features to leverage your existing investment and supports IEEE specifications. It supports mission critical features such as RSTP, STP, QoS, VLAN, RMON, DHCP, Port Mirroring, IP security, User Authentication (802.1x) and network management (SNMP/RMON/Telnet/Web/TFTP) to provide stability and interoperability. Strong software features provides advanced network analysis, management by name, management from single IP agent and stackable function, making JMG-24F4 one of the leading enterprise workgroup switch. The Jaguar series is a true investment protection and future proof Layer 2 switch suitable for various network applications.

### Hardware Specifications

#### Interface

**RJ-45 Ports:** 24 10/100/1000Base-TX auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X

**Fiber Ports:** 4 combo ports

**Power Input:** AC 100 to 240V, 50 /60Hz,

**Power Consumption:** 17.9 watts

**Dimensions:** IP-20 standard, 440 mm (W) x 44 mm (H) x 161 mm (D)

**Installation:** Rack mount or desktop

#### Environmental

**Operating Temp:** Regular: 0 to 50°C

**Storage Temp:** -40 to 85°C (-40 to 185°F)

**Operating Humidity:** 5% to 90% RH (non-condensing)

## Technical Specifications

### Standard:

IEEE802.3 10BASE-T  
IEEE802.3u 100BASE-TX/100BASE-FX  
IEEE802.3z Gigabit SX/LX  
IEEE802.3ab Gigabit 1000T  
IEEE802.3x Flow Control and Back pressure  
IEEE802.3ad Port trunk with LACP  
IEEE802.1d Spanning tree protocol  
IEEE802.1w Rapid Spanning tree protocol  
IEEE802.1p Class of service  
IEEE802.1q VLAN Tagging  
IEEE802.1x User authentication  
IEEE802.1v Protocol-based VLAN

## Performance

### Data Transfer Rate:

14,880 pps for Ethernet port  
148,800 pps for Fast Ethernet port

**MAC Address:** 8K

## Regulatory Approvals

**EMI:** FCC Class A

### EMS:

EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5,  
EN61000-4-6, EN61000-4-8, EN61000-4-11

**Safety:** CE/EN60950

**Shock:** IEC60068-2-27

**Vibration:** IEC60068-2-6

## Management Specifications

### Management:

Telnet management, Web management, Out band local console (RS-232)

### RFC standard:

RFC 1157 SNMP, RFC 1213 MIB II, RFC 1643 Ethernet like,  
RFC 1493 Bridge MIB, RFC 1757, RMON 1,  
RFC 1215 Trap, RFC 2674 VLAN MIB, private MIB

**Software Upgrade:** TFTP and Console firmware upgradeable

### Port Trunk:

Supports IEEE802.3ad with LACP function.

Up to 7 trunk groups, trunk member up to 4 ports and includes 2 uplink ports

### Spanning Tree:

RSTP and STP

### VLAN:

Port based VLAN

IEEE802.1q Tag VLAN

IEEE802.1v Protocol VLAN (IP, IPX,..)

Static VLAN groups up to 256, Dynamic VLAN group up to 2048,

VLAN ID from 0 to 4094

**Quality of Service:** Supports 8 priority levels ID for two priority queue

**Class of Service:** 2 queues per port, High/ low queue.

Service rule: first come first service; all High before Low, WRR for High or low weight

**Port-based Priority:** Supports 3 settings: "Disable, Low and High priority".

When set to "Disable", the income packet will follow QoS policy;

Otherwise, the packet will follow port priority setting to "High/Low" queue

### Network Media:

10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m)  
100Base-TX: 2-pair UTP/STP Cat. 5/5e cable EIA/TIA-568 100-ohm (100m)

**Protocol Technology:** CSMA/CD

**Switching Architecture:** Store and Forward

**Memory Buffer:** 1Mbytes

**Back-plane:** 48 Gbps

**Transfer Packet Throughput:** 35.52Mpps @ 64bytes

**Free Fall:** IEC60068-2-32

**Class 1 DIV 2:** Pending\*

**DNV:** Pending\*

**Environmental:** WEEE, RoHS

**MTBF:** 350,000 hrs based on Mil-Hdbk-217F, GB

**Warranty:** 5 years

### IGMP:

Supports IGMP V1 and V2 snooping.

IGMP Snooping for Multi-Media application, IGMP group supports 256 groups

### Port Security:

MAC address filter for ingress and egress packet

Static MAC address lock for source address

### Port Mirror:

Global system supports 3 mirroring types: "RX, TX and Both packet"

Maximum of port mirror entries is up to 25

### Bandwidth Control:

Per port Bandwidth controls. Per level - 100K

**DHCP:** DHCP client

### Packet filter:

Broadcast storm control