



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