

# JGS2402GBM



## 24-Port L2 Managed Gigabit Ethernet Switch with 2 SFP Dual Media

The JGS2402GBM is a L2 managed Gigabit switch that supports SNMP, Web UI and CLI management interface. It is equipped with 22 Giga TP ports and 2 of which are dual media ports that accommodate optional 10/100/1000Base-T or SFP modules. In addition, the switch implements the QoS (Quality of Service), Mac Filtering Policy, Port Mirror, VLAN and full L2 protocol. It is suitable for workgroups or WAN edge application.

### Benefits

#### **2 Dual Media for Flexible Fiber Connection**

23, 24 dual media port are provided for flexible fiber connection. You can select to install optional transceiver modules in these slots for short, medium or long distance fiber backbone attachment. Use of the SFP will disable their corresponding built-in 10/100/1000Base-T connections.

#### **QoS support layer 4 classification**

The switch supports not only Layer 2 802.1p Priority Queue control, but also supports programmable higher layer classification and prioritization to enable enhanced Quality of Service (QoS) support for real time applications base on information taken from Layer 2 to Layer 4, such as VoIP.

#### **Port Mirroring Helps Supervisor Monitoring Network**

Port mirroring copies traffic from a specific port to a target port. This mechanism helps track network errors or abnormal packet transmission without interrupting the flow of data.

#### **Q-in-Q VLAN for performance & security**

The VLAN feature in the switch offers the benefits of both security and performance. VLAN is used to isolate traffic between different users and thus provides better security. Limiting the broadcast traffic to within the same VLAN broadcast domain also enhances performance. VLAN support enabling advanced techniques such as "802.1Q-in-1Q" to be deployed.

#### **802.3ad Port Trunk for Bandwidth Aggregation**

The Gigabit ports can be combined together to create a multi-link load-sharing trunk. Up to 12 Gigabit ports can be set up per trunk for bandwidth up to 24Gbps, all traffic is aggregated based on MAC addresses, thus balancing the traffic load. The switch supports up to 8 trunking groups. Port trunks are useful for switch-to-switch cascading, providing very high full-duplex speeds.

### **802.1x Access Control Improve Network Security**

802.1x features enable user authentication for each network access attempt. Port security features allow you to limit the number of MAC addresses per port in order to control the number of stations for each port. Static MAC addresses can be defined for each port to ensure only registered machines are allowed to access. By enabling both of these features, you can establish an access mechanism based on user and machine identities, as well as control the number of access stations.

### **802.1D Compatible & 802.1w Rapid Spanning Tree**

For mission critical environments with multiple switches supporting STP, you can configure the switches with a redundant backup bridge path, so transmission and reception of packets can be guaranteed in event of any fail-over switch on the network.

### **Broadcast/Multicast Storm Control**

To limit too many broadcast/multicast flooding in the network, broadcast/multicast storm control is used to restrict excess traffic. Threshold values are available to control the rate limit for each port. Packets are discarded if the count exceeds the configured upper threshold.

## Key Features

- **Standard compliance**

1. IEEE 802.3x Flow Control capability
2. IEEE 802.1q VLAN
3. IEEE 802.1p

- **Performance**

#### **Switching capacity:**

1. 24 Gigabit Ethernet ports with non-blocking wire speed performance.
2. 8 K MAC addresses
3. 400KB on-chip frame buffer.
4. Supports Jumbo frame support, up to 9K
5. Broadcast/Multicast Storm Suppression
6. Port Mirroring

#### **VLAN**

1. Port-base VLAN
2. IEEE802.1q tag-base VLAN, up to 256 active VLANs
3. Q-in-Q is an efficient method for enabling Subscriber Aggregation.

#### **Qos**

1. Supports Layer 4 TCP/UDP Port and ToS Classification
2. Supports 802.1p QoS with two level priority queue
3. Supports priority in a Q-in-Q tag

#### **Bandwidth Control**

1. Supports bandwidth rating per port ingress and egress rate limit 1000Mbps with 1Mbps



- **Protocol**

- **LACP**

- 1. Port trunking with 8 trunking group
    2. up to 12 ports for each group.

- **GVRP/GARP**

- 1. 802.1q with GVRP/ GARP

- **Multicasting**

- 1. Supports IGMP snooping including active and passive mode

- **STP/RSTP**

- 1. 802.1d/1w/1s STP

- **Network Security**

- 1. 802.1x access control
  2. Management Access Policy Control (ACL)

- **Snmpv1,v2c Network Management**

(1)RFC 1213 MIB (MIB-II)

- \*Interface MIB
- \*Address Translation MIB
- \*IP MIB
- \*ICMP MIB
- \*TCP MIB
- \*UDP MIB
- \*SNMP MIB

(2)RFC 1757 RMON MIB

- \*Statistics Group 1
- \*History Group 2
- \*Alarm Group 3
- \*Event Group 9

(3)RFC 1493 Bridge MIB

(4)RFC 1643 Ethernet MIB

(5)Enterprise MIB

## Specifications

### LED Description

	LED	Color	Function
Global	POWER	Green	Lit when +5V power is coming up
Global	CPU	Green	Blinks when CPU is activity
Port 1-24	LINK/ACT	Green	Lit when connection with remote device is good Blinks when any traffic is present
Port 1-24	10/100/1000Mbps	Green/Amber	Lit Green when TP link on 1000Mbps speed Lit Amber when TP link on 100Mbps speed Off when 10Mbps or no link occur
Port 23,24	SFP	Green	Lit when SFP connection with remote device is good Blinks when any traffic is present



**Diagnostic LED:**

<b>System LED :</b>	Power
<b>10/100/1000M TP Port Per Port LED:</b>	Link/Act, 1000/100Mbps
<b>Gigabit SFP Module LED:</b>	SFP

**Network Interface**

	Connector	Port
<b>10/100Mbps TP Jack (RJ-45)</b>	TP(RJ-45)	1 to 24
<b>1000Mbps SFP Fiber Module Dual Media Auto Detection</b>	SFP	23, 24

**Cable and Maximum Length:**

<b>TP</b>	Cat. 5 UTP cable, up to 100m
<b>1000Base-SX SC M-M</b>	Up to 220/275/500/550m, which depends on Multi-Mode Fiber type
<b>1000Base-LX SC S-M</b>	Single-Mode Fiber, up to 10/30/50Km
<b>1000Base-LX WDM SC S-M</b>	Single-Mode Single Fiber, Bidi 20Km

**Hardware Spec.**

Feature	Detailed Description
<b>Voltage</b>	100~240 V
<b>Frequency</b>	50~60 Hz
<b>Consumption</b>	30W
<b>Ambient Temperature</b>	0° to 50°C
<b>Humidity</b>	5% to 90%
<b>Dimensions</b>	44(H) × 442(W) × 209(D) mm
<b>Safety</b>	Comply with FCC Part 15 Class A & CE Mark Approval

**Ordering information**

MODEL	DESCRIPTION
JGS2402GBM	24-Port L2 Managed Gigabit Ethernet Switch 2 SFP Dual Media

