# JHA-MIGS416HG

**20-port Managed Industrial Ethernet Switch, with 4 1000Base-X SFP Slot and 16 10/100/1000Base-T(X) Ethernet Port**

## Features

■Support 4 1000Base-X SFP slot and 16 10/100/1000Base-T(X) Ethernet port.

■Support Auto-MDIX, and full/half duplex self-negotiation mode；

■Provide SC/FC/ST/LC interface fiber port, support single/dual fiber transmission；

■Support 10K bytes giant frame, compatible with various extension protocol；Support IPv6 Protocol；

■DC10-58V redundancy power, reverse polarity protection.

■Industrial grade 4 design, -40-85°C operating temperature.

■IP40 rated aluminum alloy housing, DIN-Rail mounted.

## Introduction

JJHA-MIGS416HG is a new generation     Managed Industrial ethernet switch with 16-Port 10/100/1000Base-TX and 4-Port 100/1000Base-X SFP Slot that provide stable and reliable Ethernet transmission offered by JHA TECH,with high quality design and reliability. It is positioning in the broadband network intervention market, to offer and realize Ethernet data exchange, convergence and long-distance optical transmission with efficient bandwidth and reliable fiber optic network solutions for users. The industrial switch complies with various characteristics such as mini size, no fan, low power consumption, high reliability and stability, and easy to maintain.

With dual power input design, JHA-MIGS416HG can offer redundant mechanisms for critical applications that need always-on connections. It can also operate either at standard operating temperature range -40 to 85°C. Housed in rugged DIN rail or wall mountable IP40 enclosures, these switches are perfect choices for harsh environments, such as industrial networking, intelligent

transportation systems (ITS) and are also suitable for many military and utility market applications where environmental conditions exceed commercial product specifications.
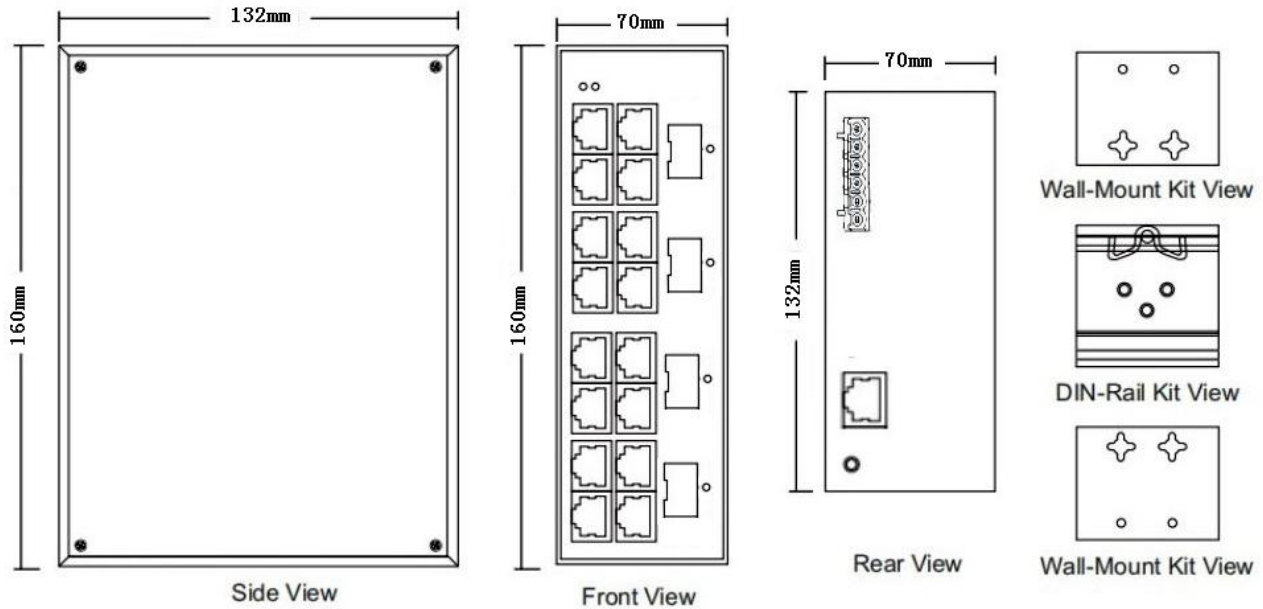
## Specification

| Interface | |
|---|---|
| Fiber Port | 4*100/1000Base-X SFP |
| Ethernet Port | 16*10/100/1000 Base－T |
| Manage Port | 1*RJ45 Console port |
| Ethernet standards | IEEE802.3　　　IEEE802.3u　　　IEEE802.3z IEEE802.3ab　　IEEE802.3x　　IEEE802.3az IEEE802.3ah IEEE802.1X IEEE802.1Q |
| Packet buffer | 4Mbits |
| Maximum packet length | Up to 10KBytes |
| MAC address table | 8K |
| Transmission mode | Store and Forward(full/half duplex mode) |
| Exchange property | Delay time: < 7μs Backplane bandwidth: 40Gbps Packet forwarding rate: 1488100 (64Byte) |
| LED Indicator | Power：Connect-always RJ45：Link/Act: connect-always; data exchange-twinkle Speed light: 100Mbps-always; 10Mbps-twinkle Fiber：Link/Act: connect-always; data exchange-twinkle SYS：System running light |
| **Physical Property** | |
| Protection grade | IP40 aluminum case |
| Cooling mode | Natural cooling, no fan design |
| Dimensions | 160mm x 132mm x 70mm (L x W x H) |
| Installation mode | DIN trail/wall-mountable |
| Weight | 1200g |
| **Working Environment** | |
| Operating Temperature | -40℃~85℃ |
| Operating Humidity | 5%~90% non-condensing |
| Storage | -40℃~85℃ |
| **Warranty** | |
| MTBF | 500,000 hours |
| Defects Liability Period | 3 year warranty, lifetime technical support |
| **Certification Standard** | |
| EMI | FCC Part15 Subpart B Class A,EN 55022 Class |

|  | A |
|---|---|
| EMS | EN61000-4-2(ESD),          EN61000-4-3(RS), EN61000-4-4(EFT),        EN61000-4-5(Surge), EN61000-4-6(CS), EN61000-4-8, EN61000-4-11 |
| Collision | IEC60068-2-27 |
| Drop | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Safety grade | EN60950-1 |

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|---|---|
| Software Features | Redundant network: STP, RSTP, MSTP, IT-T G.8032 Ethernet Ring Protection Switching (ERPS)for redundant cabling ERPS/ Ring for Redundant Cabling, recovery time<20ms in 250 devices |
| | Multicast: IGMP Snooping V1/V2/V3 |
| | VLAN: IEEE 802.1Q4K VLAN, GVRP, GMRP, QINQ |
| | Link Aggregation: Dynamic IEEE 802.3ad LACP Link Aggregation, Static Link Aggregation |
| | QOS: COS, DSCP, 8 queues, WRR/SP/WFQ scheduling, QOS Policy |
| | Management Function: CLI, Web based management, SNMP v1/v2c/v3, Telnet/SSH server for management |
| | Diagnostic Maintenance: Port mirroring, Ping |
| | Alarm management: 1 way relay alarm output, RMON, SNMP Trap |
| | RMON, MIBII, Port mirroring, Event syslog, DNS, SNTP, IEEE 802.1ab LLDP |
| | Security: DHCP Server/Client/Relay option 82/Snooping User hierarchical management |
| | Flexibility security: Port based and MAC based IEEE 802.1X, ACL, HTTP/HTTPS, SSL/SSH v2 |
| | Broadcast storm suppression, Un known-Multicast suppression and Unknown-Unicast suppression |
| | Software upgrade via HTTP, redundant firmware to avoid upgrade failure |

## Dimension



132mm

160mm

Side View

70mm

160mm

Front View

70mm

132mm

Rear View

Wall-Mount Kit View

DIN-Rail Kit View

Wall-Mount Kit View

## Order Information

| Model No. | Description of Goods |
|---|---|
| JHA-MIGS416HG | Managed Industrial Ethernet Switch, 4 1000Base-X SFP Slot and 16 10/100/1000Base-T(X), DIN-Rail, DC10-58V, -40-85°C Operating Temperature |
| JHA-MIGS416PHG | Managed Industrial PoE Switch, 16 10/100/1000Base-T(X) PoE/PoE+ and 4 1000Base-X SFP Slot, DIN-Rail, DC48-58V, -40-85°C Operating Temperature |
| **Power Supply:**DC24V DIN-Rail Power Supply or Power Adapter is Optional.(Non-PoE) | |
| DC48V DIN-Rail Power Supply or Power Adapter is Optional.(PoE) | |