

JetNet 3018G

Industrial 16+2G Gigabit Ethernet Switch



- 16 10/100-TX and 2 Gigabit RJ-45/SFP combo ports (10/100/1000 Base-TX, 1000Base-X)
- Non-Blocking Switching Performance
- Supports up to 9,216 bytes Jumbo Frame Packet for secured large file transmission
- 2 Relay Outputs for Gigabit port Link Failure Detection
- IEEE 802.1p Quality of Service (QoS) for packet forwarding precedence
- Auto Gigabit RJ-45/SFP module detection
- IP31 rugged aluminum case
- Dual 24V (12-48V) DC power inputs
- Operating temperature -25~70°C

- Industrial Intelligent NMS
- Rackmount PoE Plus Switch
- Industrial PoE Plus Switch
- Industrial 12-24V PoE Switch
- Industrial PoE Switch
- Rackmount L3/L2 Switch
- Gigabit Managed Switch
- Managed Ethernet Switch
- Entry-level Switch
- Wireless Outdoor AP
- Embedded PoE/Router Computer (LINUX)
- Industrial Communication Computer (WIN/LINUX)
- Ethernet/PoE/Serial Board
- Ethernet I/O Server
- Media Converter
- Serial Device Server
- SFP Module
- Din Rail Power Supply

Overview

The Korenix JetNet 3018G is an Industrial Switch, equipped with 16 RJ-45 10/100Mbps ports and 2 10/100/1000TX with 1000-SX SFP combo ports. The SFP ports accept all types of Gigabit SFP Transceivers, such as Gigabit SX, LX, LHX, ZX and XD for several connections and distances. The JetNet 3018G also

supports Jumbo frame transmission, up to 9216-bytes packet size, which is crucial especially while the industrial applications requesting the transmission with large size files. The JetNet 3018G adopts the rigid aluminum case, the unique Korenix-Design, which is the right option for the hazardous environments.

The Flexible Gigabit RJ-45/SFP Combo Ports

The JetNet 3018G is equipped with two Gigabit RJ-45/SFP combo ports. Each Gigabit port combines a small form factor pluggable SFP (mini-GBIC port to accommodate 1000Base-SX or 1000Base-LX connectivity) and a RJ-45 Gigabit copper port. The switch will automatically detect the priority

of the Gigabit cable connections for each Gigabit port. The fiber SFP module with various ranges of fiber transceivers is capable to fulfill the tailor made industrial applications greatly. Moreover, Korenix equips 2 relay outputs to deliver alarms while the Gigabit RJ-45/SFP ports failing.

High Performance and Jumbo Frame

The JetNet 3018G supports 16 Fast Ethernet ports plus 2 Gigabit uplink ports which can provide 12.8G non-blocking bandwidth and performance. The gigabit interface is used to act as the uplink path as the lower 10/100 ports have bigger uplink bandwidth. Unlike pure 10/100 High Ports Switch, the uplink ports may not easily be the bottleneck of the

transmission. Considering the industrial application requirements, the JetNet 3018G enables the Jumbo frame supported by default. The jumbo frame, which is up to 9,216 bytes, divides the large files into less packet frames. Thus, the gaps between the frames become fewer, and the packet transmitting becomes more efficiency.

Quality of Service

The JetNet 3018G focuses on the entry level applications which allocate numerous Fast Ethernet devices and provide higher bandwidth to Gigabit Backbone Switch.

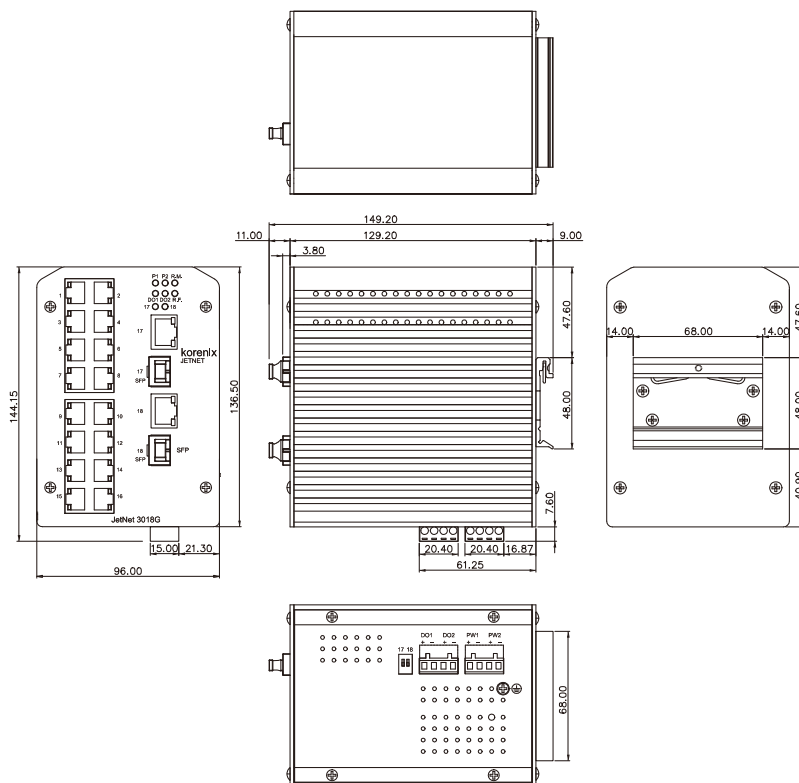
The IEEE802.1p Quality of Service (QoS) mechanism enlarges and extends the performance of networking transmissions on the field sites.

Hazardous Environment Application

To survive in harsh environments, the JetNet 3018G is well-designed with the wide range redundant power input with rigid housing, supporting the IP31 aluminum case with -25~70°C system operating temperature, providing excellent heat radiation.

Furthermore, Korenix also delivers you the certified SFP fiber transceivers with the same operating temperature for the JetNet 3018G and saves the purchase time consuming without quality concerns and issues.

Dimension (Unit = mm)



Specification

Technology

Standard:

IEEE802.3 10Base-T
 IEEE802.3u 100Base-TX
 IEEE802.3ab 1000Base-T
 IEEE802.3z Gigabit Ethernet
 IEEE802.3x flow control and back pressure
 IEEE802.1p Class of Service

Switch Technology:

Store and Forward Technology, up to 12.8Gbps High System Throughput

MAC Address: 8K MAC address table

System Packet Buffer: 2Mbits shared packet buffer

Jumbo Frame: Enable Jumbo Frame, Up to 9,216 bytes

Quality of Service: Compliance with IEEE802.1p class of service with Tag Based Priority rule.

Each switch port provides 4 priority queues as following - 8 (Higher) : 4(High) : 2(Low) : 1(Lower) scheduling.

The Tag Priority ID as following: Highest (6,7), High (4,5), Low (0,3), Lowest (1,2)

Interface

Number of Ports: 16 x 10/100 Base-TX with Auto MDI/MDI-X function, ,Auto-Negotiation

2 x 1000Base-T supports Auto MDI/MDI-X , Auto-Negotiation function and combo with Small Form Factor Package (SFP) socket

Connectors:

10/100 Base-TX: RJ-45

1000Base-T: RJ-45

SFP: supports all 3.3v SFP type Gigabit fiber transceiver

Power: 4-Pin Removable Terminal Block

Relay Output: 4-Pin Removable Terminal Block

DIP 1 = Relay 1 = Port 17 Link Down

DIP 2 = Relay 2 = Port 18 Link Down

Cables:

RJ-45 connector: supports CAT-3, CAT-4, CAT-5 unshielded twisted pair or shielded twisted pair cable. The maximum link distance is 100 meters

Diagnostic LED:

System: Power 1, Power 2 (Green); Relay 1, Relay 2 (Red)
 10/100/1000Base-T RJ-45: Link/Activity (Green/Green Blinking), Full Duplex/Collision (Yellow/Yellow Blinking)
 Gigabit SFP: Link/Activity (Green/Green Blinking)
 Relay Output: Relay Output 1 (Red), Relay Output 2 (Red)
 10/100 Mbps RJ-45 port: Link (Green/Left), Activity(Yellow Blinking/Right)

1000Base-T RJ-45 port: 10/100 Link (Green/Left), 1000 Link (Yellow/Right), Activity (Green Blinking/Yellow Blinking)

SFP port: Link/Activity (Green/Green Blinking)

Power Requirements

System Power: 4 pins terminal block for power input. DC 24V (12~48V) with polarity reverse protection and redundant function

Power Consumption: Max. 15 Watts

Mechanical

Installation: DIN-Rail or Wall mount

Case:

Aluminum metal case with IP31 grade case protection for drop-waterproof and dustproof

Dimension: 137mm(H) x 96mm (W) x 129mm (D)

Weight: 1kg without package

Environmental

Operating Temperature: -25 ~70°C

Operating Humidity: 0% ~ 90%, (non-condensing)

Storage Temperature: -40 ~ 85°C

Storage Humidity: 0%~ 95%, (non-condensing)

Hi-Pot: 1.5KV

Regulatory Approvals

EMI: FCC Class A, CE/EN55022

EMS: IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8

Safety: UL 508

Vibration: IEC60068-2-6

Shock: IEC60068-2-27

Free Fall: IEC60068-2-32

MTBF: At least 200,000 hours @ 25°C

Warranty: 5 years

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Intelligent
NMS

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PoE Plus
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L3/L2 Switch

Gigabit
Managed
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Entry-level
Switch

Wireless
Outdoor AP

Embedded
PoE/Router
Computer
(LINUX)

Industrial
Communication
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Ethernet/PoE/
Serial Board

Ethernet
I/O Server

Media
Converter

Serial Device
Server

SFP Module

Din Rail
Power Supply

Ordering Information

JetNet 3018G Industrial 16+2G Gigabit Ethernet Switch

Includes:

- JetNet 3018G
- Quick Installation Guide
- CD User's manual

Optional Accessories

Gigabit Multi-Mode SFP Transceiver

Gigabit Single-Mode SFP Transceiver

Gigabit BIDI/WDM Single-Mode SFP Transceiver