JetNet 3906G

Industrial 6-port Gigabit IEEE802.3af/at PoE Switch

- 6-Port Gigabit PoE Switch
- 4-Port IEEE 802.3af/ 802.3at PSE
- 1 100Mbps/1000Mbps SFP Fiber Uplink port
- 1 1000Mbps RJ-45 Uplink port
- Maximum PoE Output 110W at 65°C
- Embedded DC 48V Booster
- DC 12V/24V Input
- 9KB Jumbo frame support
- Mega Pixel IP surveillance network solution
- User configurable Multiple-Event Alarm Relay Output
- IP30 Rugged Steel Metal Housing design
- Harsh Environment Temperature -40~75°C

CE FC RoHS

| 100/1000 Fiber | Alarm Relay | DC Booster | DC 12V/24V |
| PoE 110W/65°C | Jumbo Frame | -40~75°C | |

Overview

The JetNet 3906G is a rugged entry-level industrial grade Gigabit PoE Ethernet Switch that supports 4-ports Gigabit RJ-45 with High Power feeding ability- Power-over-Ethernet, 1-port Gigabit RJ-45, and 1 SFP socket for 100Mbps or 1000Mbps Fiber connection. The PoE ports support IEEE 802.3at and IEEE 802.3af for 30Watts and 15Watts Power-over-Ethernet application. It also compliance with the IEEE standards- IEEE 802.3/ 802.3u/ 802.3ab/ 802.3z standards and supports several link speeds and modes.

Embedded DC Boosting for Vehicle / PV IP surveillance

The Power over Ethernet technology is commonly in the IP surveillance applications. Most of applications need to install DC 48V for Power Source Equipment (Ethernet Switch with PSE), and it is easy to obtain in residential building, but difficult from vehicle. The JetNet 3906G embedded DC booster to solve the lack of 48V issue. It accepts DC power from Vehicle or Photovoltaic (PV) DC battery (12V or 24V), then boosting voltage up to 48V, and offers PoE system power budget up to 110W in 65°C ambient temperature. The JetNet 3906G also can

working at hashed environment with -40°C~75°C wide operating temperature.

Enlarge Networking Connection

JetNet 3906G provides 2 Gigabit ports uplink which are 1 Gigabit Ethernet RJ-45 and SFP port for 100Mbps or 1000Mbps Fiber Transceiver. Both of interfaces are working independent. Therefore, the JetNet 3906G can offer high speed connection through Ethernet copper, or through the multi-mode or single-mode fiber for extra – long distance connection.

Entry Level, Hi-Performance, Power Over Ethernet Solution

The 6-port Gigabit Power over Ethernet solution – JetNet 3906G is designed and aimed to special vertical market– IP surveillance on vehicle or where DC 48V is lacked. The 14Gbps high speed fabric and large frame forwarding ability as well as offers better performance for the Mega Pixel cameras. Therefore, the JetNet 3906G is the best choice of Entry-Level Gigabit Power over Ethernet Switch which with significant benefits of cost effective, high performance, connective flexibility and easy installation.

Dimensions
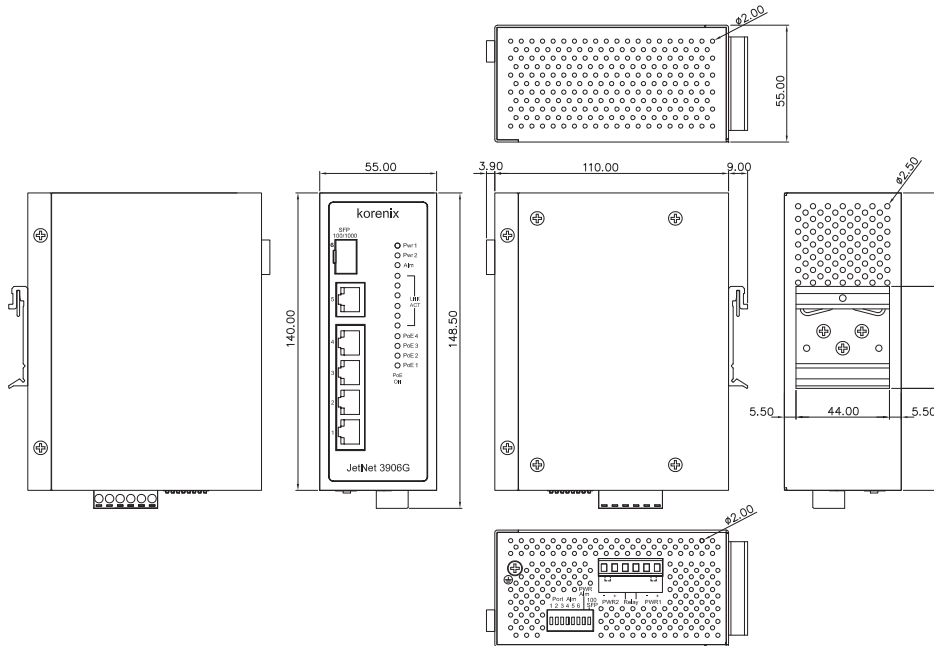
Specifications

Technology
Standards:
IEEE 802.3 10Base-T
IEEE 802.3u 100Base-TX
IEEE 802.3u 100Base-FX
IEEE 802.3ab 1000Base-T
IEEE 802.3z Gigabit Ethernet Fiber
IEEE 802.3af Power over Ethernet
IEEE 802.3at High Power PoE with 2-Event classification
IEEE 802.3x flow control and back-pressure

Performance
Switch MAC Table: 2K MAC address
Packet Buffer: 1Mbits embedded
Switching architecture: Store and Forward technology
Forwarding frame size: 64bytes ~ 9Kbytes jumbo frame
System throughput:
10Mbps -14880 PPS
100Mbps-148800 PPS
1000Mbps -1488000 PPS
PPS:packet per second, 64Bytes packet length

Interface
Gigabit Ethernet RJ-45: 5 x 1000Mbps RJ-45 with Auto MDI/MDI-X, auto negotiation and port event function, embedded 4 x IEEE 802.3af/IEEE 802.3at compliance PSE

ports (Port #1~#4), Alternative –A mode powering
SFP Socket: 1 x SFP socket for Gigabit 1000Mbps SFP or Fast Ethernet 100Mbps SFP transceiver. Manual selected and activate by DIP-Switch and power reset.
Power: Redundant Power input with polarity protection; designed in 6-pin removable terminal block connector.
Alarm relay output: 1 dry relay output, designed in 6-pin removable terminal block connector. Normal open circuit.
Cable: 100Base-TX: 2-pairs EIA/TIA 568-B UTP/STP Cat.5e/Cat.6 cable
1000Base-T: 4-pairs EIA/TIA 568-B UTP/STP Cat.5e/ Cat.6 cable
Alarm control: Ethernet port (1~6) link down and power event alarm, configure by 6-pin DIP switch.
Relay output ability: Dry Output with 0.5 A current forwarding ability with DC 24V external power system.
Relay output Type: Normal state (Alarm off) - relay output form an open circuit
Abnormal state (Alarm on) – relay output form a close circuit
Diagnostic LEDs: System: Power 1 (Green)/ Power 2 (Green), Alarm Active (Red)
Ethernet Link/Activity (Green on/ Green Blinking),
PoE powering (Amber on), SFP port: Link (Green on)

Power over Ethernet

PoE interface: Gigabit Ethernet port 1 ~ 4

Power forwarding Mode: Alternative- A (Data Pair Power feeding): Port 1~4 , V+ (3,6) V- (1,2)

PoE Classification Mode: IEEE 802.3af and IEEE 802.3at 2-Event

PoE Powering Budget: 30W PoE Output for each port, System Maximum PoE Output

DC24V, 90W/ 75°C /95% Humidity

DC24V, 110W/ 65°C /95% Humidity

DC12V, 60W/ 70°C /95% Humidity

System Inrush Current:

DC 12V / 7.6A, DC 24V/6.1A

Power Requirements

System power: Power input: DC 12V or DC 24V, variation range DC12~36V

Polarity Protection and Over-Current protection

Power consumption: 10 Watts / DC 24V at 75°C ambient environment without PoE Loading.

Mechanical

Installation: EN50022 DIN rail Snap-On mounting

Case: Steel Metal Housing with Ingress protection grade - IP30

Real / Bottom side panel with heat-dissipation holes.

Dimension : 144mm (H) x 55 mm (W) x 105mm (D) (without DIN rail Clip)

Weight: 0.8 Kg without package

Environment

Operating temperature: -40~75°C

Operating Humidity: 0~95%

Storage temperature: -40~80°C

Storage humidity: 0~95%

Regulatory & Approvals

Electrical Safety: Compliance to IEC 60950-1, UL 60950-1 Hi-pot DC 2.12KV for Power port to Case, Ethernet Port to Case

EMC/ EMI: IEC/EN 61000-6-4, CISPR 16-1-2/ -2-1/-2-3, CISPR 22, FCC Class A, CE

EMC/ EMS: IEC/EN 61000-6-2

IEC 61000-4-2 ESD: Contact 6KV / Air Con. 8KV

IEC 61000-4-3 RS: 80M~1Ghz /20V, 1.4~2Ghz/3V, 2~2.7Ghz /1V

IEC 61000-4-4 EFT: L-L/L-N 2KV, Signal 2KV

IEC 61000-4-5 Surge: L-L/1KV, L-N/2KV, Signal I/O 1KV

IEC 61000-4-6 CS: 0.15M~80Mhz / 10V

IEC 61000-4-8 PFMF: 30A/m Cont. 300A/m 1~3S.

Anti-Vibration/Anti-Shock: IEC /EN 60068-2-6 vibration: 10~150Hz, 20m/s2 (2.04g), 20 sweeps / per axis.

IEC /EN 60068-2-27 shock: 50g acceleration, 11ms duration, Half –Sine wave.

▌ Ordering Information

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JetNet 3906G Industrial 6-port Gigabit IEEE802.3af/at PoE Switch, -40~75°C

Includes:

- ■ JetNet 3906G
- ■ Quick installation x1
- ■ EN50022 DIN Rail Clip (Attached on Ethernet Switch)