

Industrial 16+2G Gigabit Ethernet Switch

JetNet 3018G



The Korenix JetNet 3018G is an Industrial Switch, equipped with 16 RJ-45 10/100Mbps ports and 2 100/1000Mbps combo ports with RJ45 and SFP slot. The SFP ports accept all types of Gigabit SFP Transceivers, such as Gigabit SX, LX, LHX, ZX and 100 FX for several connections and distances. The JetNet 3018G also supports Jumbo frame transmission, up to 2048-bytes packet size, which is crucial especially in 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.



Gigabit



Alarm Relay



Jumbo Frame



10-60VDC



-40~75°C



Heavy Industrial

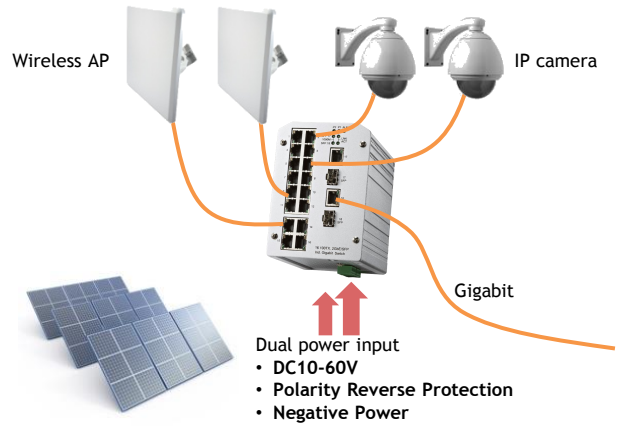
Features

- ▶ 16 x 10/100Mbps RJ-45 and 2 x 100/1000 full Gigabit RJ-45 with SFP Combo switch
- ▶ *Flow control/ broadcast storm
- ▶ Auto MDI/MDI-X, Auto-Negotiation, half / Full Duplex mode
- ▶ Wire Speed / Non-Blocking
- ▶ 2048 byte Jumbo frame support for handling large packet size data
- ▶ Dual DC10-60V Power Input with Redundancy
- ▶ Multiple-Event Alarm Relay Output
- ▶ IP31 Rugged Aluminum Housing design
- ▶ Harsh Environment Temperature -40~75°C
- ▶ EMC level: Heavy industrial EMC, approach EN50121-4 track side level

*Flow control support Unicast

Plug-&-Play High Resolution IP Surveillance

JetNet 3018G requires no user setup and starts operating as soon as it is turned on and its 16 10/100Mbps +2 100/1000 SFP Combo Ports ensure high-speed, large packet size data transmission for IP surveillance application. Therefore, users can benefit from its easy and high switch performance.



Heavy industrial EMC and track side level

JetNet 3018G fully comply with Heavy industrial EMC, IEC/EN 61000-6-2 level. and design to meet a series demanding standards covering EMC, vibration and power. Also comply to Track side. It needs to be more resistant to ESD, EFT, Surge, Radio frequency magnetic field as well as Pulse and Power magnetic field.



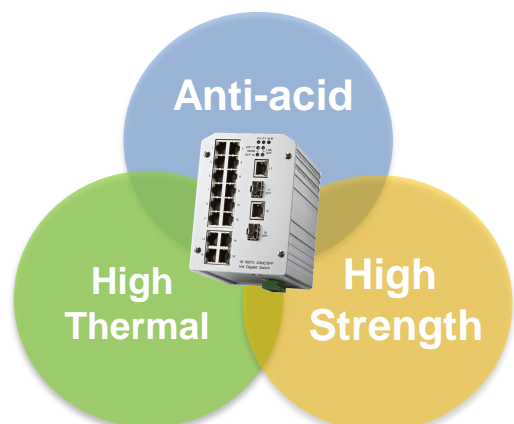
Rugged Design for Harsh Industrial Environment

JetNet 3018G can provide all critical requirements for harsh industrial environment. It conforms to heavy industrial level EMC and is anti-shock, bump and vibration. It operates in -40~75°C wide operating temperature for hazardous front-end applications.



Aluminum housing provides better protection

JetNet 3018G has acid resistant aluminum alloy with high strength and high thermal properties, can protect the JetNet 3018G to operate in different of environments



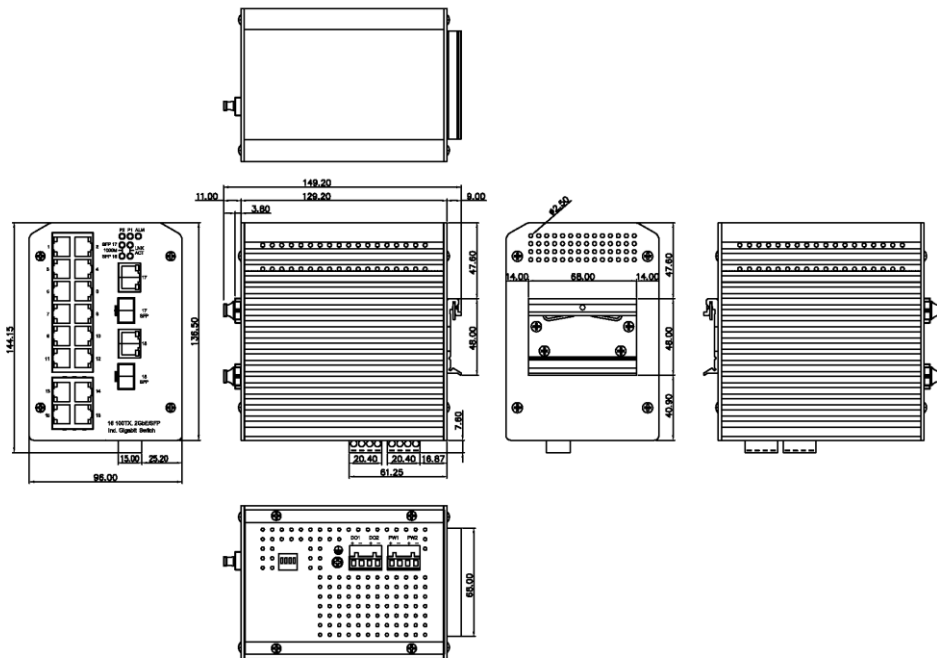
Specification

Technology	
Standard	IEEE 802.3 10 Base-T Ethernet IEEE 802.3u 100 Base-TX Fast Ethernet IEEE 802.3u 100 Base-FX IEEE 802.3ab 1000 Base-T IEEE 802.3z Gigabit Ethernet Fiber IEEE 802.3x Flow Control and Back-pressure IEEE 802.1p Class of Service (CoS)
Performance	
Switch Technology	Store and Forward Technology
System Throughput	10.7M packet per second, 64 bytes packet size 14,880pps for Ethernet 10Base-T 148,800pps for Fast Ethernet 100Base-TX 1,488,100pps for Gigabit Ethernet (PPS: Packet Per Second)
MAC Address	8K MAC address table
Packet Buffer	3Mbits embedded
Transfer Packet Size	64 bytes to 1522 bytes (includes double VLAN tag)
Transfer Performance	14,880pps for Ethernet 148,800pps for Fast Ethernet 1488,100pps for Gigabit Ethernet
Jumbo Frame	2048 bytes (default enabled)
Broadcast Storm Control	Default disabled. Traffic threshold: 1Mbps @ 10Mbps; 8Mbps @100Mbps; 80Mbps @1000Mbps
Class of Service	Default disabled. Compliance with IEEE 802.1p class of service with 4 queues each Ethernet port, and the forwarding precedence as the VLAN ID priority -Highest (6,7), High (4,5), Low (0,3), Lowest (1,2)
DIP Switch	Dry relay output with DC 24V/ 1A current forwarding ability for Gigabit port and power event alarm. Enabled by 4-pin Dip switch, default off. DIP-Switch #1: Flow Control for system (On: Enable / Off: Disable) DIP-Switch #2: Broadcast Storm Control (On: Enable / Off: Disable) DIP-Switch #3: Power Alarm (On: Enable/ Off: Disable) DIP-Switch #4: Gigabit Uplink Alarm (On: Enable/ Off: Disable)
Interface	
Ethernet Ports	16 x 10/100 Base-TX RJ-45 with Auto MDI/MDI-X, Auto-Negotiation, half/Full Duplex 2 x 100/1000 Base-T RJ45 with Auto MDI/MDI-X, Auto-Negotiation, half/Full Duplex. Both of RJ45 ports combo with SFP interface. 2 x 100/1000 SFP (Small Form Factor Pluggable) sockets combo with Gigabit RJ45.
Power Port	4-pin removable terminal block
Relay Alarm	included in 4-pin Dip switch
Cables	100 Base-TX: 2-pair UTP/STP Cat.5e/Cat.6 cable, EIA/TIA-568B 100-ohm (100m) 1000 Base-T: 4-pair UTP/STP Cat.5e/Cat.6 cable, EIA/TIA-568B 100-ohm (100m)
Diagnostic LEDs	Power Status (Green) x2: On (power is applying) Relay Alarm(Red): On (Output conductor is formed as a close circuit) Ethernet Port: Link (Green on) / Activity (Green blinking) 10/100 Ethernet Port: Full duplex (Amber on) / Collision (Amber off) 100/1000 Ethernet Port: 1000Mbps (Amber on) / 100Mbps (Amber off)
Power Requirement	
System Power	Redundant power inputs with polarity reverse protection and over current protection, support negative power.
Voltage	DC 24V (10-60V)
Power Consumption	15 Watts @ 24VDC

Mechanical	
Installation	EN50022 DIN-Rail mount
Case	Aluminum metal case with grade 31 protection
Dimension (H x W x D)	137 x 96 x 129mm (without DIN-rail clip)
Net Weight	1kg
Environmental	
Operating Temperature	-40 - 75°C
Operating Humidity	0% - 90%, (non-condensing)
Storage Temperature	-40 - 85°C
Storage Humidity	0% - 90%, (non-condensing)
Approvals	
EMC	EMI: IEC/EN 61000-6-2, CISPR 16-1-2/ 2-1/ 2-3 / 22, FCC Part 15 Subpart B Class A, ANSI C63.4 EMS: IEC/EN 61000-6-4, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-9
Shock	IEC60068-2-27
Bump	*IEC60068-2-29
Vibration	IEC60068-2-6
Free Fall	IEC60068-2-32
Warranty	5 years

*Future Release

Dimension (Unit = mm)



Ordering Information

JetNet 3018G Industrial 16+2G Gigabit Ethernet Switch

Includes:

- ▶ JetNet 3018G
- ▶ Quick Installation Guide