

Korenix Sky

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About Korenix

What's New

JetNet Series

High Tech Talk

Contact Us

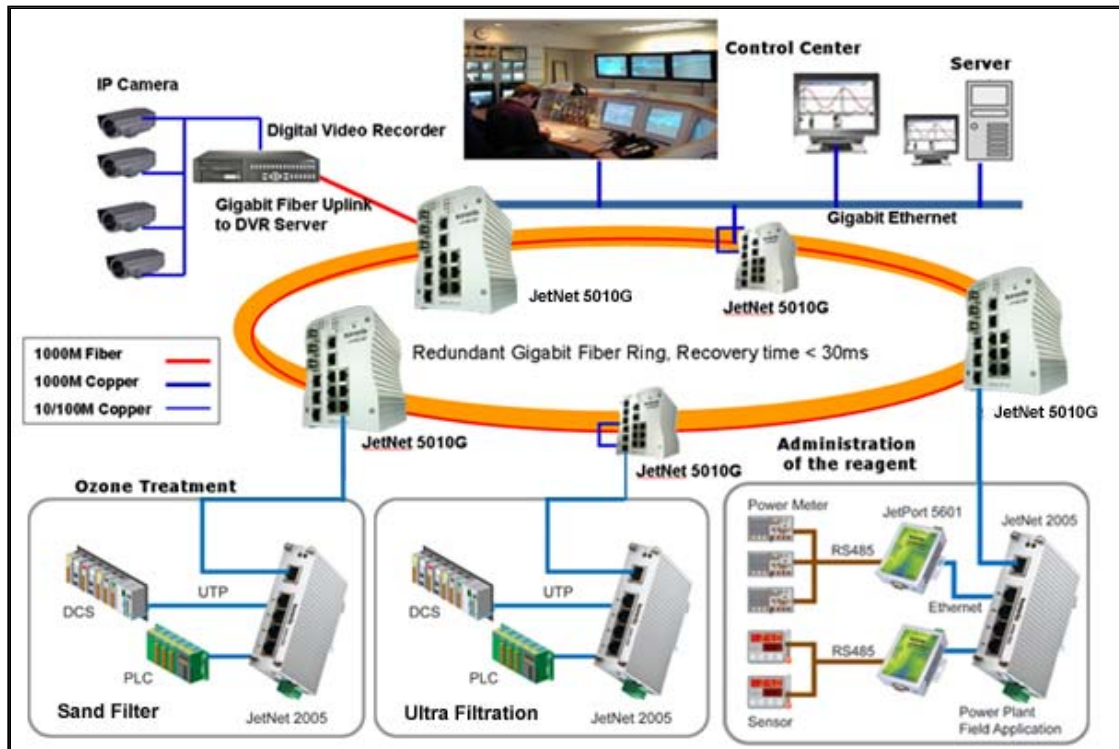
Build a Reliable Gigabit Network for Industrial Automation

With the migration of Gigabit Ethernet technology, industrial network provides 10 times of fast Ethernet bandwidth increase in supporting video conferencing, complex imaging, multi-media streaming and other data-intensive applications. To ensure a non-stop production system in industrial automation, Ethernet redundant networking solutions and watchdog mechanism are the most important requirements for establishing a reliable Gigabit network.

To provide a complete redundant network solution, Korenix Technology has implemented the redundant Ethernet network, dual homing redundancy and redundant power inputs in Gigabit Managed Switch series. Preventing system from locking up by unknown reasons, a watchdog timer technology has been widely adapted in the industrial embedded devices. It also saves lots of maintenance efforts on site to keep network alive if the switch can recover on its own always.

Network System Deployment

The typical application of a Gigabit networking system deployment for the waste water treatment application by providing a Gigabit Ethernet Redundant Ring, extra Gigabit uplink for IP surveillance system and fast Ethernet networking devices connection as following:



What's New

JetNet 5010G: The Industrial Managed Gigabit Switch with the fastest Ethernet Redundant failover time in the world

You can find relevant product information in Korenix website.

http://www.korenix.com.tw/jetnet/products_jetnet5010G-ethernet-switch.htm



Korenix releases an innovative industrial flagship managed Gigabit switch series, the [JetNet 5010G](#) industrial Gigabit Managed switch, three combo Gigabit ports plus 7-port 10/100 Fast Ethernet, with the fastest failover time in the world, less than 30 milliseconds. Featured the enhanced redundant solution, high security, and full network management functions, the JetNet 5010G suits the best for industrial automation networking with high bandwidth networking demand.

Comprehensive Redundant Solutions

The JetNet 5010G supports Rapid Super Ring technology which meets the fastest failover time in the world, less than 30 milliseconds, up to twenty units connected in a Gigabit Fiber Ring topology. The advanced Dual-

homing technology also facilitates the [JetNet 5010G](#) to connect with the core managed switch via standard Rapid Spanning Tree Protocol. To higher link availability and increase link capacity, the JetNet 5010G has been implemented IEEE 802.3ad Link Aggregation Control Protocol (LACP). With LACP technology, the JetNet 5010G can negotiate an automatic port bundling dynamically between switches. Two or more Fast Ethernet, or Gigabit Ethernet connections are combined in order to increase the bandwidth and to create resilient and redundant links. The JetNet 5010G also allows two power inputs for power redundancy and wide DC power range, from 12VDC to 48VDC and supporting -48VDC in industrial applications.

Equipping Three Flexible Gigabit Combo Ports

The JetNet 5010G equips three combo Gigabit ports, each Gigabit port combining a small form factor plug-in SFP (mini-GBICs port to accommodate 1000Base-SX, 1000Base-LX or 100Base-FX connectivity) and a RJ-45 Gigabit copper port. The switch will automatically detect the Gigabit cable connections priority for each Gigabit port. Users can connect two Gigabit ports of JetNet 5010G as a Gigabit Redundant Ring topology and the third Gigabit port as an uplink to Gigabit Ethernet backbone or Gigabit Ethernet device. The fiber SFP modular with various ranges of fiber transceivers are greatly fulfilled the tailor made industrial applications.

Enhanced Network Management Features

The [JetNet 5010G](#) also provides users many advanced management features. It can be configured smartly by SNMP, console CLI, or web browser. Network administrators can define event notification to be informed via E-mail, SNMP trap, system log or relay output. To optimize network bandwidth management, network administrators can also segment ports into different VLANs, or use IGMP Snooping to manage multicast traffic.

A Build-in Watchdog Timer

With a built-in Watchdog timer, the [JetNet 5010G](#) performs a warm boot (restarting the switch) automatically when switch's system locks up.

Major features of Industrial Gigabit Managed Switch JetNet 5010G

- 7 10/100Base-TX and 3 Gigabit RJ-45/SFP combo, (10/100/1000Base-TX, 1000Base-SX, 1000Base-LX, or 100Base-FX)
- 7.4Gbps wire-speed forwarding rate
- Supports Rapid Super Ring (recovery time < 30ms)
- Supports Dual Homing II to enable RSTP over Rapid Super Ring protocol
- Up to 5 static trunk/ 802.3ad LACP
- Supports 802.1Q VLAN/ QoS/ IGMP Snooping/ Rate Control/ Online Multi-Port Mirroring
- Supports SNMP/RMON Network, CISCO like CLI, Web management
- Secured management by HTTPS and SSH
- Event Notification by E-mail, SNMP trap, System log
- 8K MAC address auto learning
- Digital Inputs and Relay Outputs
- Redundant DC Power Inputs
- Rigid Aluminum Case Complies with the IP31 class of protection
- 1.5KV port to port isolation
- DIN-Rail/Wall-Mounting/Desktop Installation

Product Availability: JetNet 5010G series will be available by March 2007.

JetCon 2401: Extend Serial Network Connections up to 40 km

You can find relevant product information in Korenix website.

http://www.korenix.com.tw/jetcon/products_jetcon2401-media-converter.htm

The [JetCon 2401](#) is a high performance serial to fiber media converter.



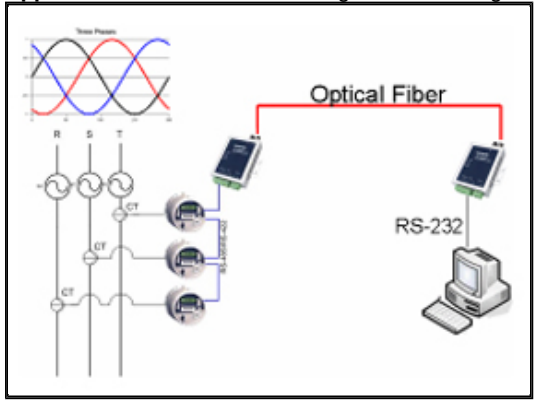
The JetCon 2401 also supports various RS-232/RS-422/RS-485 serial interfaces. With auto baud rate detection and direction control, JetCon 2401 converts the serial signal into fiber optics transmission. It widely extends the serial signal link distance up to 5KM (JetCon 2401-m Multi-mode Optical Fiber) or 40KM (JetCon2401-s Single-mode Optical Fiber) with high EMI/EMS noise immunity.

To ensure reliable transmission in hazardous environment, JetCon 2401 supports wide operating temperature, -20°C~70°C model (JetCon 2401). Furthermore, the [JetCon 2401](#) supports wide range power input (DC/AC) and three-way installation, desktop, wall mounted or Din-rail mounted.

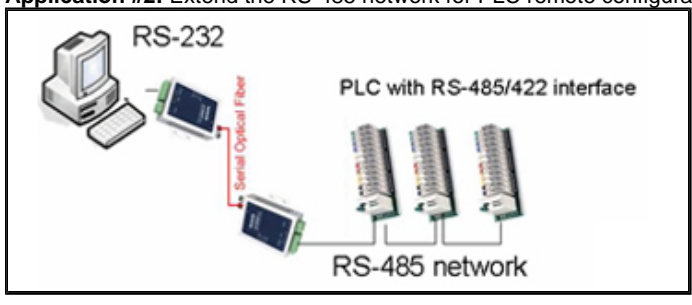
Key features of [JetCon 2401](#)

- Extends serial signal to fiber cable range
- Supports Point-To-Point or Ring transmission mode
- Supports RS-232/RS-422/RS-485 serial interfaces
- Supports Multi-mode or Single mode fiber optics
- Baud rate up to 921.6Kbps
- IP 30 case protection
- 12~48V power input with polarity reverse protection
- Supports DIN-Rail mount
- Enhanced EMS EN61000-4 Level 3 Protection

Application #1: Remote Monitoring the CT reading in Power Plant application



Application #2: Extend the RS-485 network for PLC remote configuration



www.korenix.com