

JetNet 5008G-P

Industrial 6+2G Gigabit Embedded Managed Switch Board



- Independable Embedded Managed Switch Board with 200mm (W) x 140mm(D) x30mm(H) board size
- 6 10/100Base-TX and 2 Gigabit RJ-45/SFP combo ports
- Internal gigabit port for your system connectivity
- 11.5 Watts lower power consumption at DC48V
- Watchdog timer for unexpected failure
- Supports Rapid Super Ring, RSTP, VLAN, GVRP, QoS, IGMP Snooping V1/V2/V3, Rate Control, Port Trunking, LACP, Online Multi-Port Mirroring
- Supports Web, SNMP V1/V2c/V3, RMON, HTTPS and SSH management
- Advanced security feature supports IP Security, Port Security, DHCP Server, IP and MAC Binding, 802.1x network access control

Overview

The JetNet 5008G-P is an Embedded Managed Switch Board, also known as EMSB, equipped with six 10/100-TX and two RJ-45/SFP combo front ports, one internal port for system connectivity and management. The EMSB is specially designed to combine with your embedded task-specific system. The board size is just 200mm (W) x 140mm (D) x 30mm (H), giving flexibility and compatibility in system integrating.

To enlarge your system value, JetNet 5008G-P provides abundant embedded value-added features. The layer 2 management features include multi-form ring redundancy, network control, management, monitor, security and notification. The JetNet5008G-P also provides built-in watchdog timer to avoid undetected damage. With JetNet 5008G-P EMSB, you can easily integrate the board with your existing embedded system.

EMSB, Specially Design for Embedded System

JetNet 5008G-P is an Embedded Managed Switch Board (EMSB), can easily apply to your task-specific embedded system. 6 + 2 Gigabit RJ-45/SFP combo front ports and one internal port can help well connect or control the EMSB by Web UI, Telnet, SNMP and

JetView. JetNet 5008G-P also equips dual 12-48VDC terminal block on board, 11.5W low power request. The embedded power supply of the system can boot up the two independent systems easily.

▶ A Win / Win Flexible OEM Solution

Korenix Technology, the pioneer of industrial switch, has the leading technology to fulfill your needs and demands by providing a variety of tailor-made products and services. Our business goal is to let the customers spend less time at work and fewer budgets on their applications. We offer switch board OEM/ODM services, including conformal coating for hazardous environment as well as wide-ranged fiber connection for lengthy network distance. With our working experience and in-depth know-how of

industrial networking communications, Korenix Technology is able to combine Taiwan's research/development ability with competitive production cost; hence, producing a five-year-warranty merchandize at most aggressive price. All Korenix productions enjoy not only five years warranty but also life-time online tech supports from experienced and well-trained technicians. We recognized the needs of the market and world like to establish a win-win situation and trustworthy relationship with our customers.

▶ Non-Stop Network Transmission

A key element of a perfect embedded board is its reliability and compatibility; JetNet 5008G-P is highly compatible with every vendor's equipment currently available in the market. Every JetNet 5008G-P comes with a built-in watch dog timer to maintain a non-stop operation. With RSTP over Rapid Super Ring (RSR) and Dual Homing II technology, the JetNet 5008G-P will automatically select an alternative route to transmit the data if the original route has been blocked and notify the administrator simultaneously.

With Rapid Super Ring, your network data is always transferred between switches via Gigabit ports with failover time in as low as 5ms; most importantly, the security of your data is never jeopardized. Furthermore, JetNet 5008G-P always remains operational from the disturbance of vibration, impact of shock, and environment of hazardous temperature (-10~70°C). Taking advantages of JetNet 5008G-P can help you to build up a network that is technically impossible to disconnect.

▶ Easy-to-Configure Managing Software

JetNet 5008G-P switch board fully supports many known network management software such as HP Open View, MG-Soft, SNMPc, and the leading OPC server – Kepware's KEPServerEX. It provides users with many advanced managed functions including SNMP v1/v2c/v3, IGMP snooping v1/v2/V3, VLAN, QoS, Rate control, Port Trunk, LACP, 802.1x, DHCP Server, Port security and IP security, etc... These functions can be configured easily by CLI, SNMP and web browser. JetNet 5008G-P will fulfill your system requirements and network needs, and our software will save you time and efforts for your product

development simultaneously. With Rapid Super Ring, your network data is always transferred between switches via Gigabit ports with failover time in as low as 5ms; most importantly, the security of your data is never jeopardized. Furthermore, JetNet5008G-P always remains operational from the disturbance of vibration, impact of shock, and environment of hazardous temperature (-20~70°C). Taking advantages of JetNet 5008G-P can help you to build up a network that is technically impossible to disconnect.

Power Consumption

Korenix JetNet 5008G-P has an incredibly low power consumption of 11.5 Watts at DC48V. Dual Power

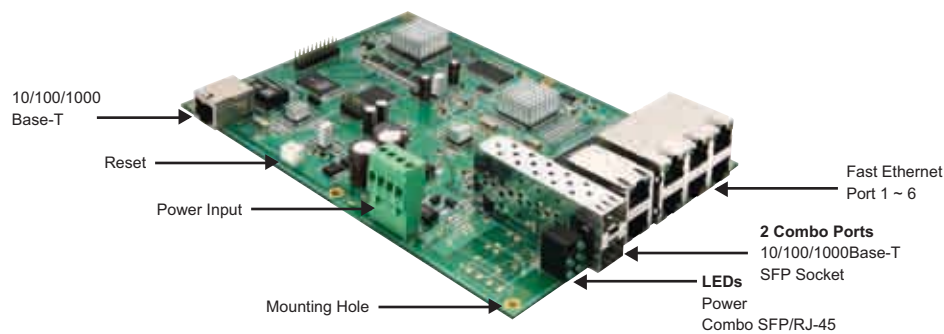
Input, 12~48V/-12~-48V DC with Reserve Polarity Protection.

System Reliability

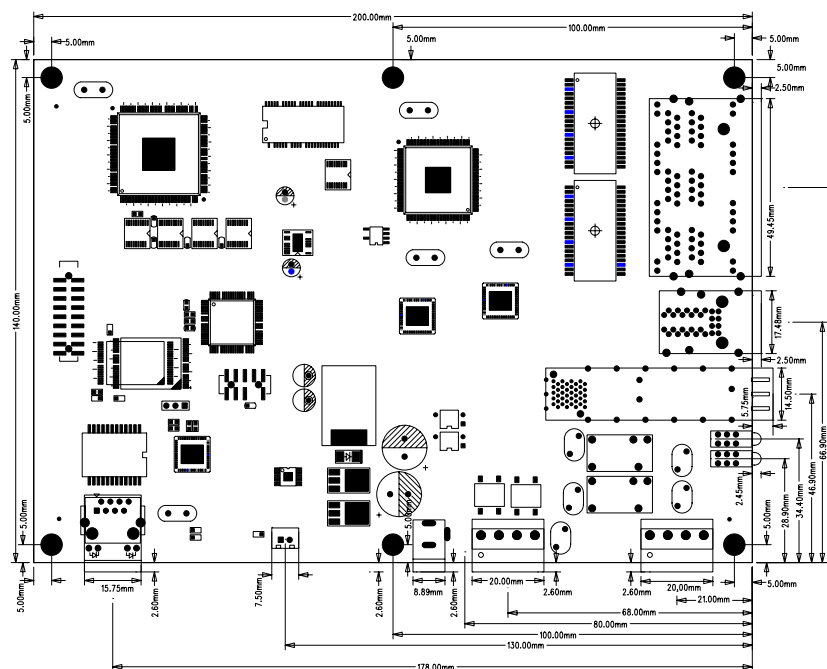
Watch Dog Timer is the network lifeguard that has a separate CPU watching over the switch. When the switch is locked up or any type of network failure, it

will perform a warm boot to restart the switch; such recovery action will save time & efforts for network administrator.

JetNet 5008G-P Appearance



Dimensions (Unit=mm)



Specification

Technology

Standard: IEEE 802.3 10Base-T Ethernet
 IEEE 802.3u 100Base-TX Fast Ethernet
 IEEE 802.3ab 1000Base-TX
 IEEE 802.3z Gigabit Ethernet Fiber
 IEEE 802.3x Flow Control and Back-pressure
 IEEE 802.1p class of service
 IEEE 802.1Q VLAN and GVRP
 IEEE 802.1D-2004 Rapid Spanning Tree Protocol (RSTP)
 IEEE802.3ad LACP

IEEE802.1X Port_based Network Access Control

Performance

Switch Technology: Store and Forward Technology with 32Gbps Switch Fabric

System Throughput: 14,880pps for 10M Ethernet, 148,800pps for 100M Fast Ethernet, 1,488,100 for Gigabit Ethernet

Transfer packet size:

64 bytes to 1522 bytes (with VLAN Tag)

MAC Address: 8K MAC

Packet Buffer: 1Mbits

Transfer performance: 14,880pps for Ethernet and 148,800 for Fast Ethernet and transfer packet size from 64 to 1522Bytes.

Management

Configuration: Cisco-Like CLI, Web, DHCP Server/Client, warm reboot, reset to default, Admin password, Port Speed/Duplex Control, status, statistic, MAC address table display, static MAC, Aging time, SNMP v1, v2c, v3, Traps and RMON1

SNMP MIB: MIB-II, Bridge MIB, VLAN MIB, SNMP MIB, RMON and Private MIB

Port Trunk: Up to 5 Static Trunk and 802.3ad LACP

VLAN: 802.1Q VLAN, GVRP. Up to 64 VLAN groups

Quality of Service: Four priority queues per port, 802.1p COS and Layer 3 TOS/DiffServ

IGMP Snooping: IGMP Snooping V1/V2/V3 for multicast filtering and IGMP Query V1/V2

Rate Control: Ingress filtering for Broadcast, Multicast, Unknown DA or All packets and filtering for All packets.

NTP: Network Time Protocol to synchronize time from internet

Embedded Watchdog: Embedded hardware watchdog timer to auto reset system when failure

Port Mirroring: Online traffic monitoring on multiple selected ports

Port Security: Port security to assign authorized MAC to specific port

IP Security: IP security to prevent unauthorized access

802.1x: Port_based Network Access Control

DHCP Server: Can assign 255 IP address, support IP and MAC binding

E-mail Warning: SMTP warning by pre-defined events

System Log: Supports both Local mode and Server mode

Network Redundancy

Rapid Spanning Tree Protocol:

IEEE802.1D-2004 Rapid Spanning Tree Protocol. Compatible with Legacy STP and IEEE802.1w.

Rapid Super Ring(RSR): 2nd generation Korenix Ring Redundancy Technology. Failure recovery within 5ms.

Dual Homing II: Multiple uplink paths to upper switches

Multiple Ring: Couple or multiple Rapid Super Rings

Legacy Super Ring: Backward compatible in client mode

Any Ring: Inter-operate with other vendors' ring

Interface

Number of Ports:

10/100TX: 6 x RJ-45, Auto MDI/MDI-X, Auto Negotiation

10/100/1000TX: 2 x RJ-45 on front side, 1 x inner port.

SFP: 2 x Hot- Swappable SFP and combo with Gigabit RJ-45

Cables:

10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable,

EIA/TIA-568 100-ohm (100m)

100 Base-TX: 2/4-pair UTP/STP Cat. 5 cable,

EIA/TIA-568 100-ohm (100m)

1000 Base-TX: 4-pair UTP/STP Cat. 5, Cat-5e cable,

EIA/TIA-568 100-ohm (100m)

LED Indicators: 2 x Power (Green)

2 x SFP Link/Activity (Green)

Inner Port Link/Activity (Green)

System Power: 2 sets of power Input within 4-pin removable terminal block

Reset: Reset button is provided to restore default settings

Power Requirements

System Power: Dual Power Input, 12~48V/-12~-48V DC with Reverse Polarity Protection

Power Consumption: About 11.5 Watts @ DC 48V

Mechanical

Dimension: 30mm(H) x 200mm (W) x 140mm (D)

Weight: 0.50kg without package and case

Environmental

Operating Temperature:-20 ~70°C

Operating Humidity: 5% ~ 95%, (non-condensing)

Storage Temperature: -40 ~ 85°C

Hi-Pot: 1.2KV for all ports and power

Regulatory Approvals

MTBF: 249,683 Hours, MIL-HDBK-217F GB standard

Warranty: 5 years

Ordering Information

JetNet 5008G-P 8-port Managed Gigabit Ethernet Embedded Switch Board

Includes:

- JetNet 5008G-P
- Documentation CD-ROM