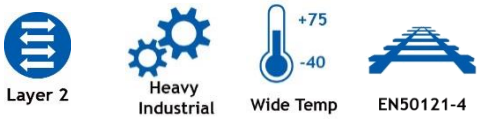
Industrial 8G RJ45 + 2G Combo Managed PoE Switch

JetNet 5210GP-2C Series

Korenix JetNet 5210GP, the DIN-Rail type industrial Gigabit Managed PoE Switch is designed with eight 10/100/1000TX ports, two Gigabit RJ-45 / SFP combo ports. JetNet 5210GP is the first industrial ethernet switch compliance with IEEE 802.3af/at/bt, each ethernet port can max supports 90W for PD, and total budget up to 480W *Note.

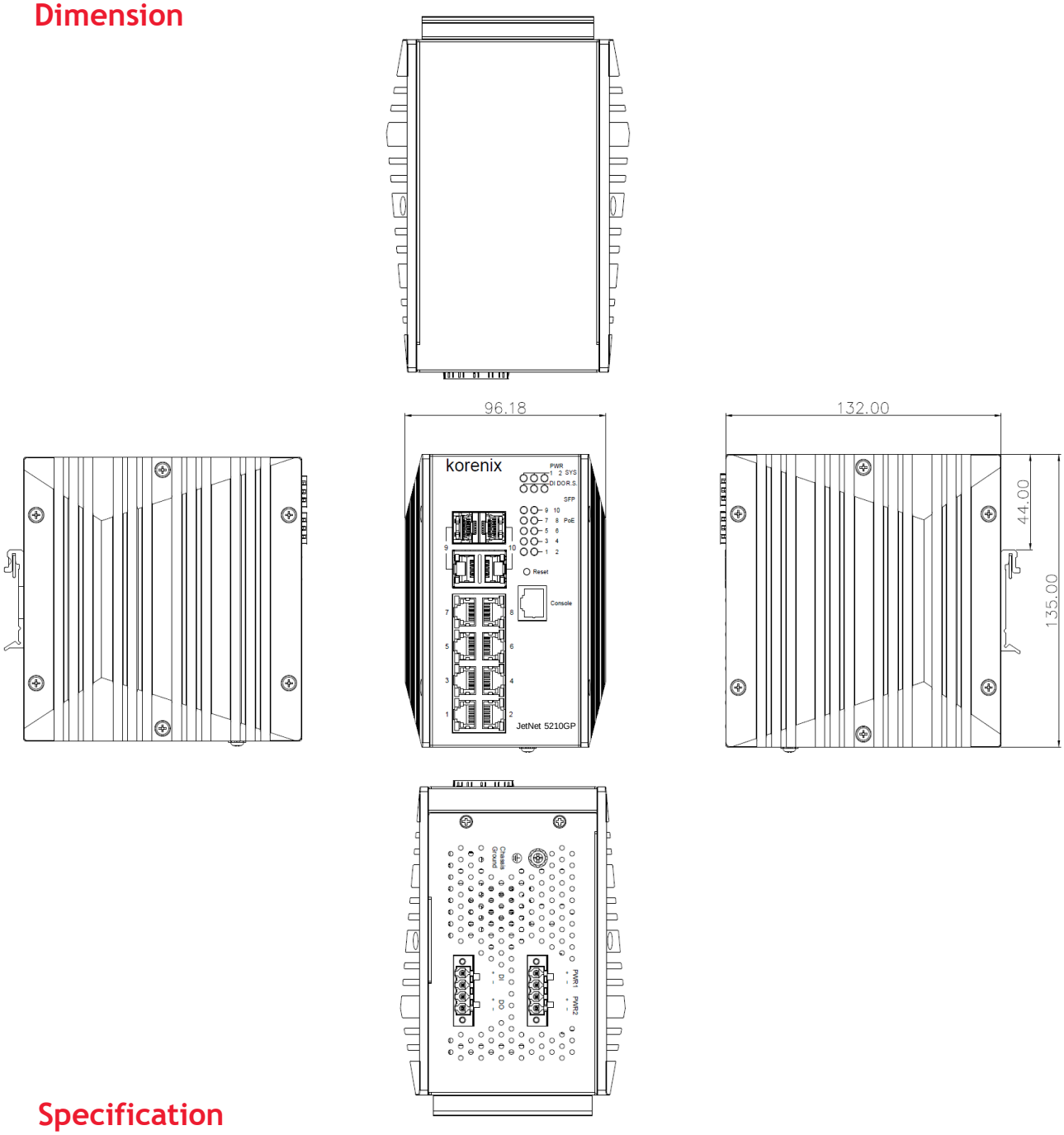
JetNet 5210GP is designed for operating reliably under harsh environments, it supports one alarm relay to indicate fault conditions, as a result users can quickly handle the emergency and shorten the failover time. With IEC 61000-6-2 / 61000-6-4 Heavy Industrial EMC and Trackside certification design, including robust enclosure and -40~75°C wide operating temperature range, JetNet 5210GP ensures high performance under traffic control systems and other Network applications.



Overview

- 8 10/100/1000 Base TX ports + 2 Gigabit RJ-45/ SFP combo
- Compliance with IEEE 802.3af/at/bt, each port max 90W High Power PoE *Note
- Total PoE Budget 480W *Note, Flexible PoE ports setting
- Network Redundancy – MSR (Multiple Super Ring), RSTP, MSTP
- Fully Device Management – SNMP v1/v2c/v3, RMON, Web UI, Telnet and Local Console
- Layer 2 Network Performance – IEEE802.1Q VLAN, Trunk, DHCP Server/Client, Traffic Prioritize, Rate Control
- Advanced Security system by Port Security, Access IP list, TACACS+
- Event Notification through SNMP trap and SysLog
- IEEE 802.1AB LLDP software for auto-topology and group management
- Cisco-Like CLI, Web, SNMP/RMON for network management
- Multiple event relay output for enhanced device alarm control
- Hi-Pot Isolation Protection for ports and power
- Railway Track Side EN50121-4 Certification
- Dual 48VDC Power input
- -40~75°C Wide Operating Temperature

Dimension



Specification

Technology	
IEEE Standards	IEEE 802.3 10 Base-T Ethernet IEEE 802.3u 100 Base-TX Fast Ethernet IEEE 802.3u 100 Base-FX Fast Ethernet Fiber IEEE 802.3ab 1000 Base-T IEEE 802.3z Gigabit Fiber IEEE 802.3x Flow Control and Back-pressure IEEE 802.1AB Link Layer Discovery Protocol (LLDP) IEEE 802.1p Class of Service (CoS) IEEE 802.1Q VLAN and GVRP IEEE 802.1 QinQ IEEE 802.1D-2004 Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.1x Port Based Network Access Protocol IEEE 802.3 af/at/bt Power over Ethernet

Specification

Performance	
Switch Technology	Store and Forward Technology with 20 Gbps Switch Fabric
System Throughput	29.7Mega packet per second
CPU performance	MIPS-4KEc CPU running at 500 MHz
System Memory	32M Bytes SPI Flash, 256M Bytes DDR3 SDRAM
Transfer packet size	64 bytes to 9K bytes Jumbo Frame (include double Tag VLAN)
MAC Address	8K
Packet Buffer	4.1Mbit
Forwarding performance	14,880 pps for Ethernet and 148,800 pps for Fast Ethernet, 1488,100 pps for Gigabit Ethernet
Interface	
Enclosure Port	• 10/100/1000 Mbps Ethernet port: 8 x RJ-45 • Gigabit Ethernet port : 2 x RJ-45 with auto MDI/MDI-X function • 100Mbps / 1000Mbps Fiber port : 2 x SFP Socket for SFP fiber transceiver with Hot-swappable and D.D.M. functions • RS-232 Console port : 1 x RJ-45 for system configuration • Digital Input / Relay Output port: 4-Pin removable terminal block connector • Power input port: 4-Pin removable terminal block connector
Ethernet Cable	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)
Digital Input	Digital Input (Hi): DC 11V~30V Digital Input (Low): DC 0V~10V Supports sink type signal input with photo-coupler isolation
Relay Output	Dry Relay output: 1A / DC 24V Supports Multiple Events Binding trigger function.
Diagnostic Indicators	• 1000Mbps RJ-45 port: Link /Activity (Green on, Green Blinking),1000Mbps (Yellow) • SFP port: Link/Activity (Green on, Green Blinking) • Power: System Power ready (Green on) • Sys: System Ready (Green on), System Updating (Green Blinking) • DO (Alarm): Alarm Relay Active (Red On) • R.S.: Green on (Ring normal)/Blinking (wrong ring port connective), Amber on (Ring abnormal) / Blinking (device's ring port failed) • PoE: Green On (PD Detect/On), Off (None-Detect/Off)
Power over Ethernet	
Standard	IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt
PoE operating mode	Auto Mode: IEEE 802.3af/at/bt Forced Mode: User configured Power consumption budget control with IEEE 802.3 PoE /PD detection, or forced without PD detection
PoE forwarding conductor	IEEE 802.3 af/at: RJ-45: V+(3,6), V- (1,2) IEEE 802.3 bt: RJ-45: V+(3,4,5,6), V- (1,2,7,8)
Power forwarding capability	8 Port PoE (#1-8) 15W/IEEE802.3af, 30W/IEEE 802.3at, 60W-90W/IEEE 802.3bt *Note
PoE System Power Budget	Port-based system power budget control PoE System Power Budget: 480Watts. *Note

Management	
Configuration, monitoring interface	•SNMP V1/V2c/V3 with SNMP Trap (4 Trap Stations), RMON Group 1 •Local RJ-45/RS-232 connector with Cisco like command
System Manage Secure	•Telnet/Local Console support command like interface with Cisco like commands. •Management Device Login Switch System by Remote RADIUS /TACACS+ account/password, key for RADIUS Server authentication
Management Utility	Management utility with IEEE 802.1AB Link Layer Protocol for Device finding and Link Topology Discovery
Network Time Protocol	NTP protocol with daylight saving and localize time sync function
System log	Local or remote log server with authentication
Alarm	1 set of alarm with current carrying capability of 1A@24V
Network Redundancy	
Ring Redundancy	Multiple Super Ring Technology, Includes Rapid Super Ring, Rapid Dual Homing,SuperChain
Rapid Dual Homing	Multiple uplink paths to one or multiple upper Switch.
SuperChain	New ring technology with flexible and scalability, compatibility, and easy configurable. The ring includes 2 types of node Switch – Border Switch and Member Switch
Rapid Spanning Tree	IEEE 802.1D-2004 Rapid Spanning Tree Protocol. Compatible with Legacy Spanning Tree and IEEE 802.1w
Multiple Spanning Tree	IEEE 802.1s Multiple Spanning Tree, each MSTP instance can include one or more VLANs, and also supports multiple RSTP deployed in a VLAN or multiple VLANs
Network Performance	
Port Configuration	Port Link Speed, Link Mode, Link Status and Port Enable/Disable
Port Trunk	IEEE 802.3ad port aggregation and static port trunk
VLAN	IEEE 802.1Q tag VLAN with 4K VLAN/GVRP entries VLAN ID Range: 1-4094
Class of Service	IEEE 802.1p class of service, 8 priority queues/port
Traffic Prioritize	Supports 8 physical queues with weighted fair queuing (WRR) or Strict Priority Schemer, which follows IEEE 802.1p CoS tag and IPv4 Type of Service/Differ information to prioritize the traffic of your industrial network
IGMP Snooping	IGMP Snooping v1/v2 for multicast filtering and IGMP Query mode, also support unknown multicast forwarding policies- Drop, Flooding and Forward to route port Max 256 groups
Rate Control	Egress rate limit
Port Mirroring	One-to-one traffic mirror monitoring
DHCP	DHCP Client/Server with IP & MAC address binding
Advanced Cyber Security	IEEE 802.1x, DHCP Snooping, Access Control List (ACL), TACACS+

Mechanical	
Installation	DIN-Rail mounting
Case	Steel metal with Aluminum heat-dissipate panel housing
Ingress Protection	IP30
Dimension (mm)	74 (W) x 132(D) x 135 (H) – w/o DIN Rail Clip
Weight	1.2Kg
Power Requirement	
System power	2x DC power input with polarity reverse protection
Input Range	DC 48V & 50V (48-57V)
PoE Power Budget	PoE 240W@48V; 480W@50V *Note
Power Consumption	10W@50VDC without PoE
Environmental	
Operating Temperature	-40 ~75°C
Operating Humidity	0% ~ 95%, non-condensing
Storage Temperature	-40 ~ 85°C, 0% ~90% Humidity
Hi-Pot	AC 1.5KV for Ethernet port and power
Regulatory Approvals	
EMC	IEC/EN61000-6-2, IEC/EN61000-6-4 Heavy Industrial EMC EMI: FCC Class A, CE/ Class A EMS:IEC/EN61000-4-2, IEC/EN61000-4-3, IEC/EN61000-4-4, IEC/EN61000-4-5, IEC/EN61000-4-6, IEC/EN61000-4-8
Railway Application	EN50121-4
Shock	Compliance with IEC 60068-2-27
Vibration	Compliance with IEC 60068-2-6
Free Fall	Compliance with IEC 60068-2-32
MTBF	551,403 hrs
Warranty	5 years

*Note:
Please choose the model with "U" for supporting IEEE 802.3bt and 480W power budget.
Kindly refer below order information for more details.

Ordering Information

Model Name	Description
JetNet 5210GP-2C	Industrial 8G RJ45 + 2G Combo Managed PoE Ethernet Switch with 240W Power Budget, -40~75°C
JetNet 5210GP-2C-U	Industrial 8G RJ45 + 2G Combo Managed PoE Ethernet Switch with 480W Power Budget, IEEE802.3af/at/bt,-40~75°C
	Includes: • JetNet 5210GP-2C Series • DIN-Rail kit • Quick Installation Guide Note: Please download User Manual from Korenix website