JetNet 5912G

Industrial DNV 12-port L2 Managed Ethernet Switch

Features

- Full GbE L2 DIN-Rail switch
- 8-port RJ-45 + 2-port RJ-45/SFP combo + 2-port SFP
- DNV Certificate
- RADIUS,TACCCS+,MAC/IP ACL,SNMPv3 to enhance cyber security
- Support multiple redundance protocols including MSR，MSTP，RSTP
- Isolated redundant power inputs
- -40 to 75°C operating temperature, fanless

Dual Power

DNV·GL

Gigabit

Overview

The JetNet 5912G series is DNV marine certificate L2 Full Gigabit Industrial switch. With DNV certificate, the JetNet 5912G can be installed in various boat application to ensure the network redundance and security on boat. Furthermore, JetNet 5912G enhance the EMC and reliability design to ensure on boat application.

In addition, the JetNet 5912G provides multiple cyber security and cyber redundancy for reliable network installation, and the isolated redundant power supplies to ensure the high secure and high availability for mission critical industrial applications.

Specification

Interface

RJ-45 Port	8 x 10/100/1000Mbps
SFP Port	2 x 100/1000Mbps
RJ-45/SFP Combo Port	2 x 100/1000Mbps
Digital Input	High: DC 11-30V Low: DC 0-10V
Relay Output	1A/DC 24V

Performance

Switch Technology	Store and Forward technology with 24Gbps Switch Fabric
CPU Performance	500 MHz
System Memory	32MB NOR flash, 256MB system RAM
Transfer packet Size	Up to 9K bytes Jumbo Frame
MAC address Table	8K
Packet Buffer	4.1Mbit
Transfer performance	14,880pps for Ethernet.148,800pps for Fast Ethernet.1,488,100pps for Gigabit Ethernet

Technology

Standard	IEEE 802.3 10Base-T IEEE 802.3u 100Base-TX IEEE 802.3ab for 1000BaseT(X) IEEE 802.3z Gigabit Ethernet Fiber IEEE 802.3x Flow Control and Back Pressure IEEE 802.1AB Link Layer Discovery Protocol (LLDP) IEEE 802.1Q VLAN and GVRP IEEE 802.1D:2004 Rapid Spanning Tree (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) IEEE802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.1x Port Based Network Access Control IEEE 802.1p class of service

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, and offers 4 management sessions • Supports Manage Station with IP Secure function, up to 4 Manage Stations • Management Device Login Switch System by Remote RADIUS 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 Power (PWR1, PWR2) failure

Network Performance

Port Configuration	Port Link Speed, Link Mode, Link Status and Port Enable/Disable
Port Trunk/ Link	IEEE 802.3ad port aggregation and static port trunk, Trunk member up to 8 ports, maximum 8 trunk groups
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/v3 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 filtering for Broadcast, Multicast, Unknown DA or All packets
Port Mirroring	On-line traffic monitoring on multiple selected target ports
DHCP	DHCP Client/Server with IP & MAC address binding
Advanced Cyber Security	IEEE 802.1x, DHCP Snooping, L2/L3/L4 Access Control List (ACL), TACACS+ Storm control

Network Redundancy

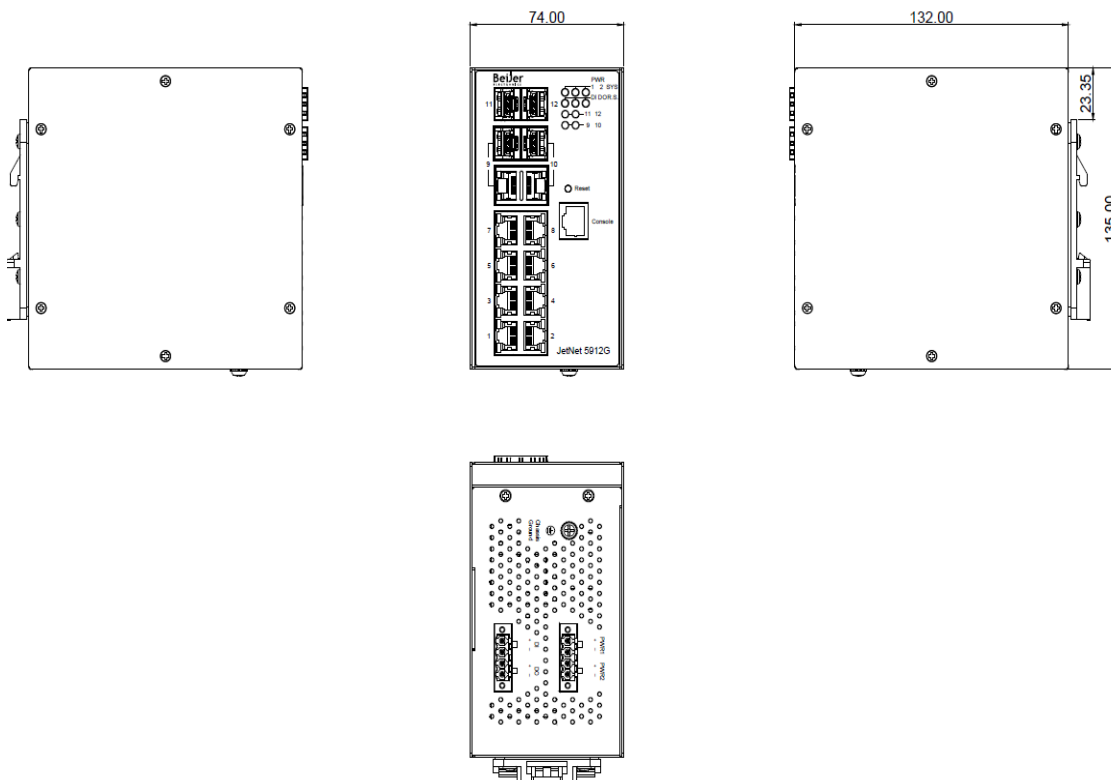| Ring Redundancy	Multiple Super Ring™ Technology, Includes Rapid Super Ring, Rapid Dual Homing,SuperChain™
Rapid Dual Homing	Multiple uplink paths to one or multiple upper Switch, up to 256 Groups RDH Peer protection
SuperChain™	It is new ring technology with flexible and scalability, compatibility, 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

Power Requirement

DC Power input	2x 10-60VDC
Power Consumption	12.96W@48VDC

Mechanical

Installation	DIN-Rail

Enclosure Material	Aluminum/Steel Metal
Dimension	135mm(H) x 74mm (W) x 132mm (D)
Weight	1.2kg with package
Ingress Protection	Robust IP30

Environmental

Operating Temperature	-40°C~75°C
Operating Humidity	10%~95%, Non-Condensing
Storage Temperature	-40°C~85°C
Hi-Pot Insulation	AC 1.5KV for Ethernet Interface to Power, Power to Case

Regulation

Marine	DNV
EMC	FCC Class A, CE EN 50121-4 EN 61000-6-4 EN IEC 61000-3-2 EN 61000-3-3 EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-8 EN 61000-4-9
Vibration	IEC 60068-2-6, IEC 60068-2-36
Shock	IEC 60068-2-27
Free Fall	IEC 60068-2-32
MTBF	734,700 hrs
Warranty	5 Years

Dimension (Unit = mm)

Ordering Information

Model Name	Description
JetNet 5912G-2C2F	Industrial marine 8G RJ45 + 2G Combo + 2G SFP Managed Ethernet Switch
Packing	Includes: • JetNet 5912G • Quick Installation Guide Note: Please download User Manual from website