IES-2050-M12

Company Overview

Key Technologies

New Products

Product Selection Guide

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Solution

Industrial Serial Card

USB Server

Accessories

>> Industrial 5-port 10/100Base-T(X) IP-67 Lite-Managed Ethernet Switch

- Supports O-Ring (recovery time < 10ms over 250 units of connection), RSTP/STP (IEEE 802.1w/D) for Ethernet Redundancy
- Waterproof M12 connector
- Multiple notification for warning of excepted event
- Web-based interface and Windows utility (Open-Vision) configuration
- Supports 5 ports 10/100Base-T(X)
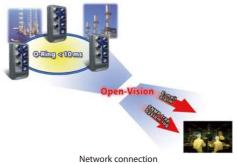- Rigid IP-67 housing design

> Features

- World's fastest Redundant Ethernet Ring: O-Ring (recovery time < 10ms over 250 units of connection)
- Multiple Redundant Ethernet technology RSTP/STP, O-Ring supported to protect your industrial network
- SNMP v1 support for secured network management
- Configurable by Web-based and Windows utility (**Open-Vision**)

- Environmentally sealed by IP-67 grade protection and ultrarugged enclosure for toughest industrial usages
- Event notification through Syslog, Email, and SNMP trap
- Very wide operating temperature range from -40°C to 70°C
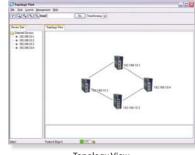- Rigid IP-67 housing design
- DIN-Rail mounting enabled

> Introduction

   IES-2050-M12 is a Waterproof lite-managed Redundant Ring Ethernet switch with 5x10/100Base-T(X) ports which full compliant with IP-67 standard. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection) and RSTP/STP (IEEE 802.1w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. It is specifically designed for the toughest industrial environments. In combination with its IP-67 design and the superb management functionality. IES-2050-M12 is constructed of a rugged weather tight aluminum case and designed with IP-67 rated RJ45 Ethernet ports (M12 type connector), which provide a waterproof, and dust-tight connection. IES-2050-M12 can be managed centralized and convenient by a powerful windows utility — Open-Vision. In addition, the wide operating temperature range from -40°C to 70°C can satisfy most of operating environment. The IES-2050-M12 can be easily adopted in almost all kinds of applications and provides the most rugged solutions for managing your network in outdoor. Therefore, IES-2050-M12 is one of the most reliable choices for industrial networking application.
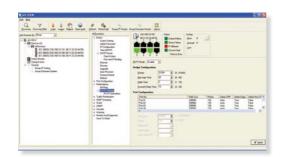
> Open-Vision

   ORing's switches are intelligent switches. Being different from other traditional redundant switches, ORing provides a set of Windows utility (**Open-Vision**) for users to manage and monitor all of industrial Ethernet switches on the industrial network.
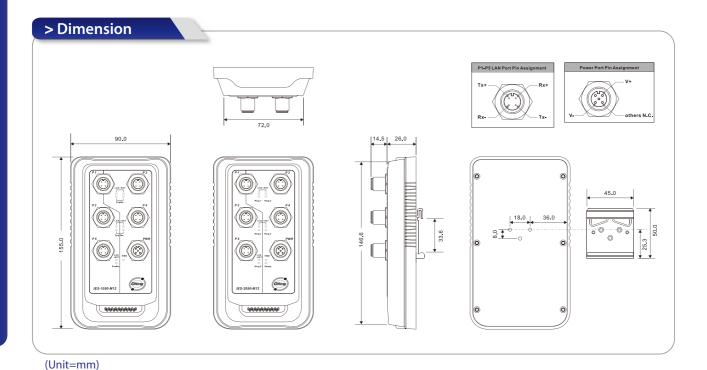
Network connection

Topology View

Monitoring and Configuration interface

> Dimension

(Unit=mm)

> Specifications

ORing Switch Model	IES-2050-M12
Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	5
Connector Type	M12 Waterproof (A-cording)
Technology	
Ethernet Standards	IEEE 802.3 for 10BaseT, IEEE 802.3u for 100BaseT(X) IEEE 802.3x for Flow control IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)
MAC Table	2048 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching bandwidth : 1.0Gbps VLAN: Port Based

Security Features	Enable/disable ports VLAN to segregate and secure network traffic
Software Features	STP/RSTP (IEEE 802.1D/w) Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units Port configuration, status, statistics, monitoring, security
Network Redundancy	O-Ring STP RSTP

LED Indicators	
Power Indicator	Green : Power LED x 1, Indicate power input
Ready / Ring Master Indicator	Amber LED : Light on for system ready Blinking for system ready and Ring master mode Light off for system failed
O-Ring Indicator	Amber : Indicate port operated in O-Ring mode (per port)
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. (per port)

Power	
Redundant Input Power	12~ 48 VDC voltage power input
Connector Type	M12 Waterproof
Power Consumption (Typ.)	3 Watts
Overload Current Protection	Present
Reverse Polarity Protection	Present

Physical Characteristic	
Enclosure	IP-67
Dimension (W x D x H)	90(W) x 40.5(D) x 155(H) mm (3.54x1.59x6.1 inch.)
Weight (g)	470 g

Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-40 to 70°C (-40 to 158°F)
Operating Humidity	5% to 95% Non-condensing

Regulatory approvals	
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Shock	IEC60068-2-27
Free Fall	IEC60068-2-32
Vibration	IEC60068-2-6
Safety	EN60950
Warranty	5 years

> Ordering Information

IES-2 AA B-M12

Code Definition	10/100Base-T(X) Port Number	Additional Port Number
Option	**- 05:** 5 ports	**- 0:** 0 ports

Available Model	Model Name	Description
	IES-2050-M12	Industrial 5-port IP-67 Lite-managed Ethernet Switch with 5x10/100 TX

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