

IES-3082GP

**Industrial 10-port managed Ethernet switch with 8x10/100Base-T(X)
and 2x100/1000Base-X, SFP socket**

Features

- World's fastest Redundant Ethernet Ring: **O-Ring** (recovery time < 10ms over 250 units of connection)
 - **Open-Ring** support the other vendor's ring technology in open architecture
 - **O-Chain** allow multiple redundant network rings
 - Support standard IEC 62439-2 **MRP** (Media Redundancy Protocol) function
 - MSTP/RSTP/STP(IEEE 802.1s/w/D)
 - Support **PTP Client** (Precision Time Protocol) clock synchronization
 - Support Modbus/TCP protocol
 - IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
 - Port Trunking for easy of bandwidth management
 - Support port mirror function to monitoring data
 - SNMP v1/v2c/v3, RMON and **SSH/HTTPS** support for secured network management
 - Support Non-blocking ports function
 - Support LLDP protocol
 - Event notification through Syslog, Email, SNMP trap, and Relay Output
 - Port lock to prevent access from unauthorized MAC address
 - Windows utility (**Open-Vision**) support centralized management and configurable by Web-based ,Telnet, Console(CLI)
 - Support two SFP connectors for 100/1000Base-X SFP
- Fiber
- Rigid IP-30 housing design
 - DIN-Rail and wall mounting enabled



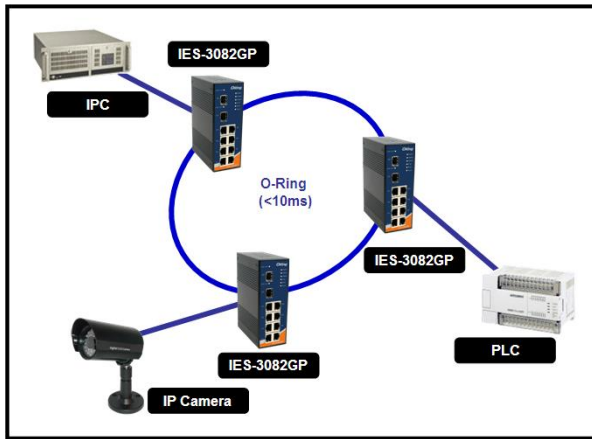
Introduction

IES-3082GP is managed Redundant Ring Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X SFP ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-Chain, MRP and MSTP/RSTP/STP (IEEE 802.1s/w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. Another Open-Ring technology is also supported which can applied for other vendor's proprietary ring. O-Chain is the revolutionary network redundancy technology that provides the add-on network redundancy topology for any backbone network, O-Chain allows multiple redundant network rings of different redundancy protocols to join and function together as a larger and more robust compound network topology. O-Chain providing ease-of-use while maximizing fault-recovery swiftness, flexibility, compatibility, and cost-effectiveness in one set of network redundancy topology. IES-3082GP can be managed centralized and convenient by a powerful windows utility — Open-Vision. In addition, the wide operating temperature

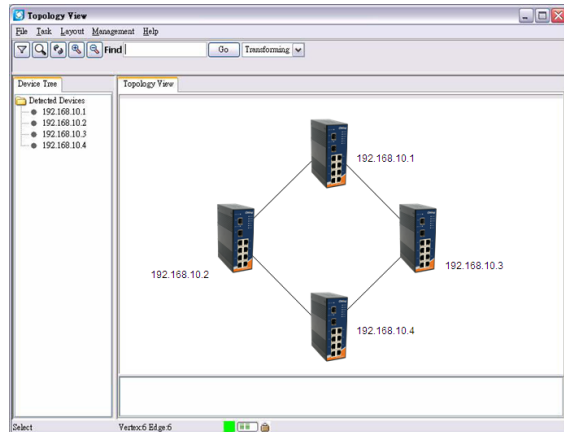
range from -40 to 70°C can satisfy most of operating environment. Therefore, the switch is one of the most reliable choice for highly-managed Fiber Ethernet application

Open-Vision

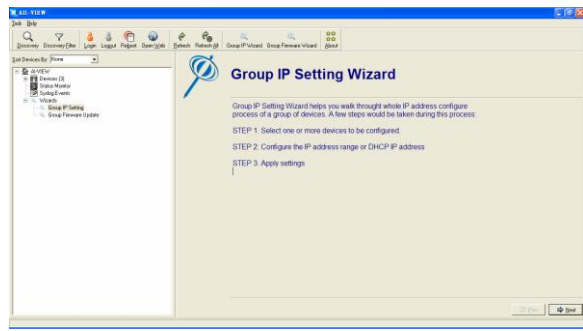
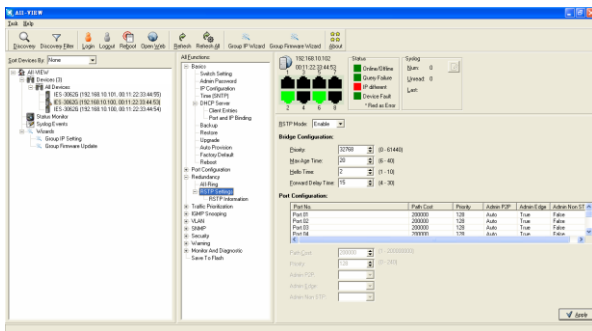
ORing's switches are intelligent switches. Different from other traditional redundant switches, ORing provides a set of Windows utility (Open-Vision) for user to manage and monitor all of industrial Ethernet switches on the industrial network.



Network connection

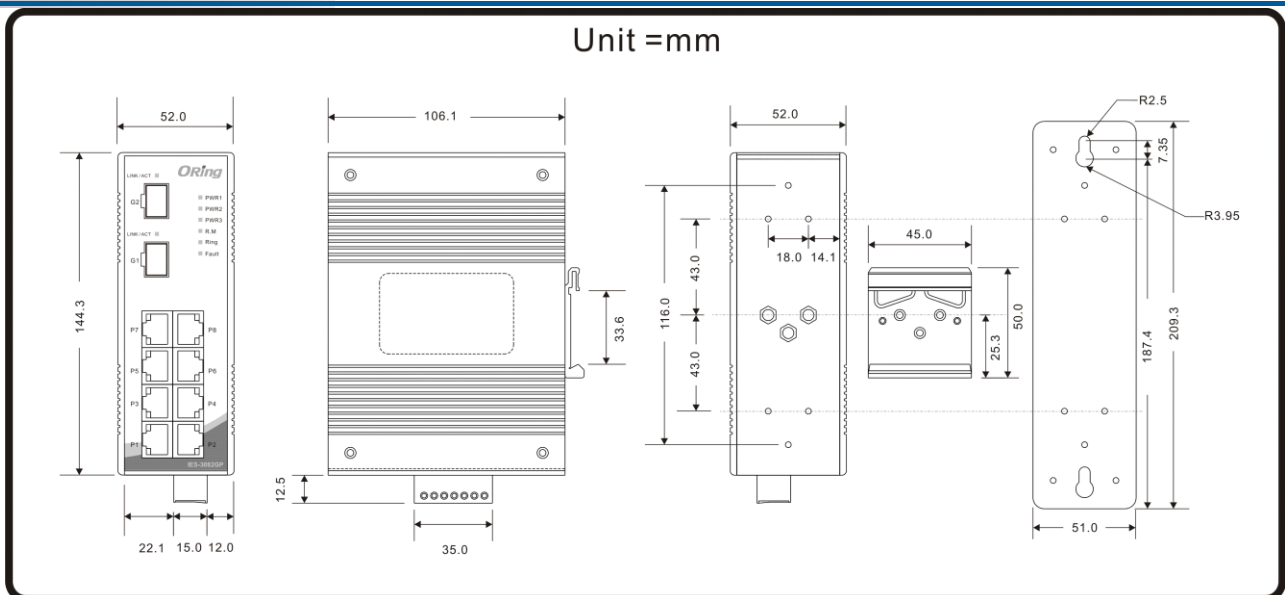


Topology View



Monitoring and Configuration interface

Dimension



Specifications

ORing Switch Model	IES-3082GP
Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	8
100/1000Base-X SFP Ports	2
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-SX/LX/ZX IEEE 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol) IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching latency: 7 us Switching bandwidth: 5.6Gbps Max. Number of Available VLANs: 4096 IGMP multicast groups: 1024 Port rate limiting: User Define
Security Features	Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1Q) to segregate and secure network traffic Supports Q-in-Q VLAN for performance & security to expand the VLAN space Radius centralized password management SNMP v1/v2c/v3 encrypted authentication and access security HTTPS/SSH supported for management
Software Features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units TOS/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and GVRP supported IGMP Snooping for multicast filtering Port configuration, status, statistics, monitoring, security SNTP for synchronizing of clocks over network Support PTP Client (Precision Time Protocol) clock synchronization DHCP Server / Client support Port Trunk support Port mirroring Non-blocking ports MVR (Multicast VLAN Registration) support Modbus TCP
Network Redundancy	O-Ring Open-Ring O-Chain MRP STP / RSTP / MSTP
Warning / Monitoring System	Relay output for fault event alarming Syslog server / client to record and view events Include SMTP for event warning notification via email Event selection support
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 9600bps, 8, N, 1
LED Indicators	
Power Indicator	Green : Power LED x 3

R.M. Indicator	Green : Indicate system operated in O-Ring Master mode
O-Ring Indicator	Green : Indicate system operated in O-Ring mode
Fault Indicator	Amber : Indicate unexpected event occurred
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for Duplex/Collision
100/1000Base-X SFP Port Indicator	Green for port Link/Act
Fault Contact	
Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Redundant Input Power	Triple DC inputs. 12~48VDC on 7-pin terminal block, 12~45VDC on power jack
Power Consumption (Typ.)	9 Watts
Overload Current Protection	Present
Reverse Polarity Protection	Present on terminal block
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	52(W)x106.1(D)x144.3(H) mm (2.05x4.18x5.68 inch.)
Weight (g)	730 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	EN60950-1
MTBF	294,689 hours
Warranty	5 years

Ordering Information

IES-3AABCC



Code	10/100Base-T(X)	Additional Port Number	Additional Port Type
Definition	Port Number		
Option	- 08: 8 ports	- 2: 2 ports	-GP: 100/1000Base-X SFP port
Available	Model Name	Description	
Model	IES-3082GP	Industrial 10-port managed Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X, SFP socket	

Packing List

- IES-3082GP x 1
- ORing Tool CD x 1
- Quick Installation Guide x 1
- DIN-Rail Kit x 1
- Wall-mount Kit x 1
- Console Cable x 1

Optional Accessories

- **Open-Vision M500 : Powerful Network Management Windows Utility Suit, 500 IP devices**
- **DR-45 series : 45 Watts DIN-Rail power supply**
- **DR-75 series : 75 Watts DIN-Rail power supply**
- **PAE-121000, 12VDC/1000mA 12W Power Adapter with universal 100 to 240VAC input, EU plug**
- **SFP100 series : 100Mbps SFP optical transceiver**
- **SFP 1G series : 1Gbps SFP optical transceiver**
- **DR-120 series : 120 Watts DIN-Rail power supply**
- **PAA-121000, 12VDC/1000mA 12W Power Adapter with universal 100 to 240VAC input, US plug**