# IES-3082GP

## Industrial 10-port Managed Ethernet Switch

## Highlights

- Supports **O-Ring** (recovery time < 10ms over 250 units of connection), **Open-Ring, O-RSTP,** RSTP/STP (IEEE 802.1w/D) for Ethernet Redundancy
- Supports SNMP v1/v2c/v3 & RMON & Port based/802.1Q VLAN Network Management
- Multiple notification for warning of excepted event
- Web-based ,Telnet, Console, CLI, and Windows utility **(Open-Vision)** configuration
- Support two SFP 1000Base-X ports
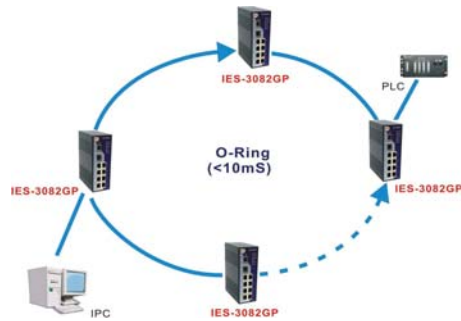- Triple Redundant DC power inputs



## 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-RSTP** support applications with complex topology
- RSTP/STP(IEEE 802.1w/D)
- IGMP snooping for filtering multicast traffic
- Port Trunking for easy of bandwidth management
- SNMP v1/v2c/v3 support for secured network management
- RMON for traffic monitoring

- 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
- Triple redundant DC power inputs of terminal block and power jack
- Support two SFP connectors for 1000Base-X SFP Fiber.
- Very wide operating temperature range from -40°C to 70°C
- Rigid IP-30 housing design
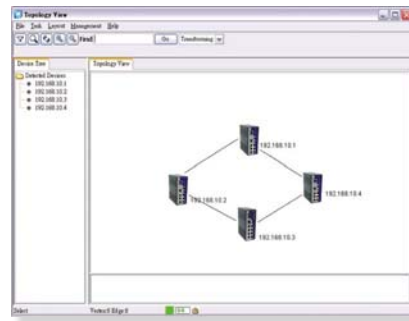- DIN-Rail and panel mounting enabled

## Introduction

　　IES-3082GP is managed Redundant Ring Ethernet switch with 8x10/100TX & 2x1000 SFP ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-RSTP and RSTP/STP (IEEE 802.1w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology.  IES-3082GP 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. Therefore, the switch is one of the most reliable choice for highly-managed and Fiber Ethernet application.
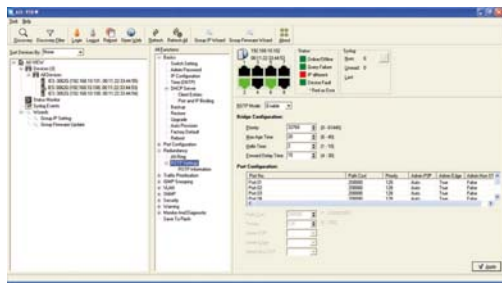
## Open-Vision

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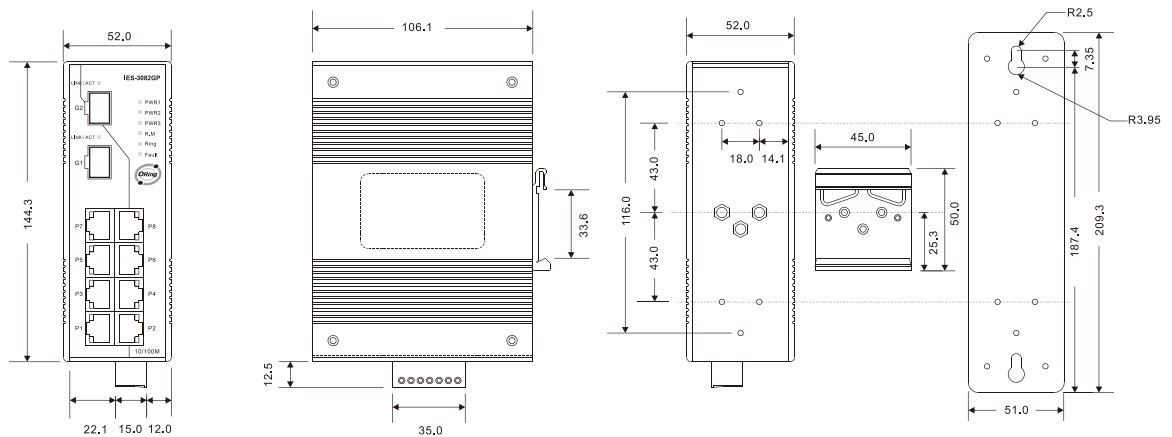


Network connection



Topology View



Monitoring and Configuration interface

## Dimension

(Unit=mm)

## Specifications

| ORing Switch Model | IES-3082GP |
|---|---|
| **Physical Ports** | |
| 10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX | 8 |
| 1000Base-X with SFP | 2 |
| **Technology** | |
| Ethernet Standards | IEEE 802.3 for 10Base-T, <br> IEEE 802.3u for 100Base-T(X) and 100Base-FX, <br> IEEE 802.3x for Flow control <br> IEEE 802.3ad for LACP (Link Aggregation Control Protocol) <br> IEEE 802.1D for STP (Spanning Tree Protocol) <br> IEEE 802.1p for COS (Class of Service) <br> IEEE 802.1Q for VLAN Tagging <br> IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) <br> IEEE 802.1X for Authentication <br> 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 <br> Switching bandwidth: 5.6Gbps <br> Max. Number of Available VLANs: 4096 <br> IGMP multicast groups: 1024 <br> Port rate limiting: User Define |
| Security Feature | Enable/disable ports, MAC based port security <br> Port based network access control (802.1x) <br> VLAN (802.1Q ) to segregate and secure network traffic <br> Radius centralized password management <br> SNMPv3 encrypted authentication and access security |
| Software Features | STP/RSTP (IEEE 802.1D/w) <br> Redundant Ring (O-Ring) with recovery time less than 10ms over 250 units <br> TOS/Diffserv supported <br> Quality of Service (802.1p) for real-time traffic <br> VLAN (802.1Q) with VLAN tagging and GVRP supported <br> IGMP Snooping for multicast filtering <br> Port configuration, status, statistics, monitoring, security |
| Network Redundancy | O-Ring <br> Open-Ring <br> O-RSTP <br> STP <br> RSTP |
| RS-232 Serial Console Port | RS-232 in RJ45 connector with console cable.  Baud rate setting: 9600bps, 8, N, 1 |
| **LED indicators** | |
| Power indicator | Green : Power LED x 3 |
| R.M. indicator | Green : Flashing to indicate system operated in U-Ring Master mode |
| O-Ring indicator | Green : Indicate system operated in O-Ring mode |
| Fault indicator | Yellow : Indicate excepted event occurred |
| 10/100TX RJ45 port indicator | Green for port Link/Act.  Yellow for Duplex/Collision |
| 1000 Base-T / Fiber port indicator | Green for port Link/Act.  Yellow for Link |
| **Fault contact** | |
| Relay | Relay output to carry capacity of 1A at 24VDC |

Industrial Ethernet Switches

| 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(D)x144(H) mm (2.05x4.17x5.67 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 |
| **Warranty** | 5 years |

## Ordering Information

**IES-3 AA B CC**

| Code efinition | 10/100TX Port Number | Additional Port Number | Additional Port Type |
|---|---|---|---|
| **Option** | **- 08:** 8 ports | **- 2:** 2 ports | **- GP:** 1000Base-X in SFP |

| | Model Name | Description |
|---|---|---|
| Available Model | IES-3082GP | Industrial 10-port Managed Ethernet Switch with 8x 10/100TX & 2x 1000 SFP |