IPS-3082GC-24V

Industrial 10-port managed PoE Ethernet switch with 8x10/100Base-T(X) P.S.E. and 2xGigabit combo ports, SFP socket, 24V power inputs

Features

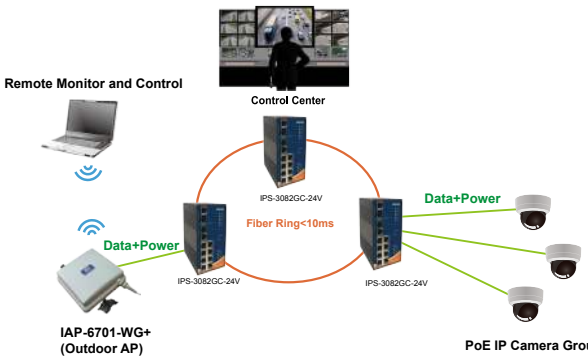
- World's fastest Redundant Ethernet Ring: **O-Ring** (recovery time < 10ms over 250 units of connection)
- **Open-Ring** support the other vendor's ring technology in open architecture
- Support MRP(IEC 62439-2) Ethernet redundant protocol
- STP/RSTP/MSTP supported
- Supports IEEE 802.3af compliant PoE and total power budget is 120Watts with maximum 15.4Watts per port in -40°C ~ 70°C
- Provide **PoE power on delay** function, users can define delay time for PoE power supply
- Support **PTP Client** (Precision Time Protocol) clock synchronization
- IGMP v2/v3 (IGMC snooping support) for filtering multicast traffic
- Port Trunking for easy of bandwidth management
- SNMP v1/v2c/v3 support for secured network management
- RMON for traffic monitoring
- Support LLDP (Link Layer Discovery Protocol)
- Supports DDM (Digital Diagnostic Monitoring) function
- Support dual wide range 24~36VDC power inputs for power redundancy
- 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 Gigabit combo ports
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

Introduction

IPS-3082GC-24V is managed redundant ring Ethernet switch with 8x10/100Base-T(X) ports with PoE (P.S.E.) function and 2xGigabit combo ports. With completely support of Ethernet redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring 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. IPS-3082GC-24V also supports Power over Ethernet, a system to transmit electrical power, along with data, to remote devices over standard twisted-pair cable in an Ethernet network. IPS-3082GC-24V supports wide range 24~36VDC power inputs and generates 48VDC P.S.E. power output per port. Each IPS-3082GC-24V switch has 8X10/100Base-T(X) P.S.E. (Power Sourcing Equipment) ports. P.S.E. is a device (switch or hub for instance) that will provide power in a PoE setup. IPS-3082GC-24V support new DDM (Digital Diagnostic Monitoring) function, which can monitor instantly the status of electronic voltage, current and temperature. All function of IPS-3082GC-24V can be managed centralized 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 and Fiber Ethernet application with PoE function.

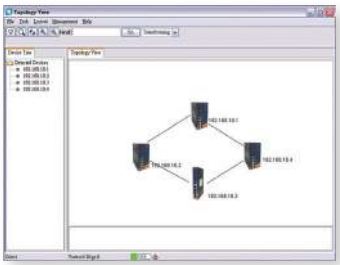
Open-Vision

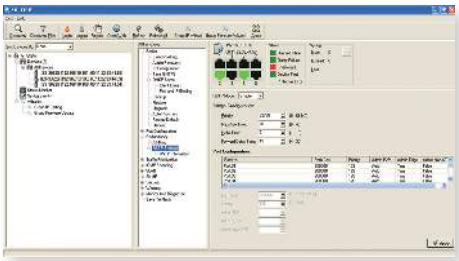
ORing's switches are intelligent switches. Being different from other traditional redundant switches, ORing provides a set of Windows utility (**Open-Vision**) for user to manage and monitor all of industrial Ethernet switches on the industrial network.



Network connection

DDM function

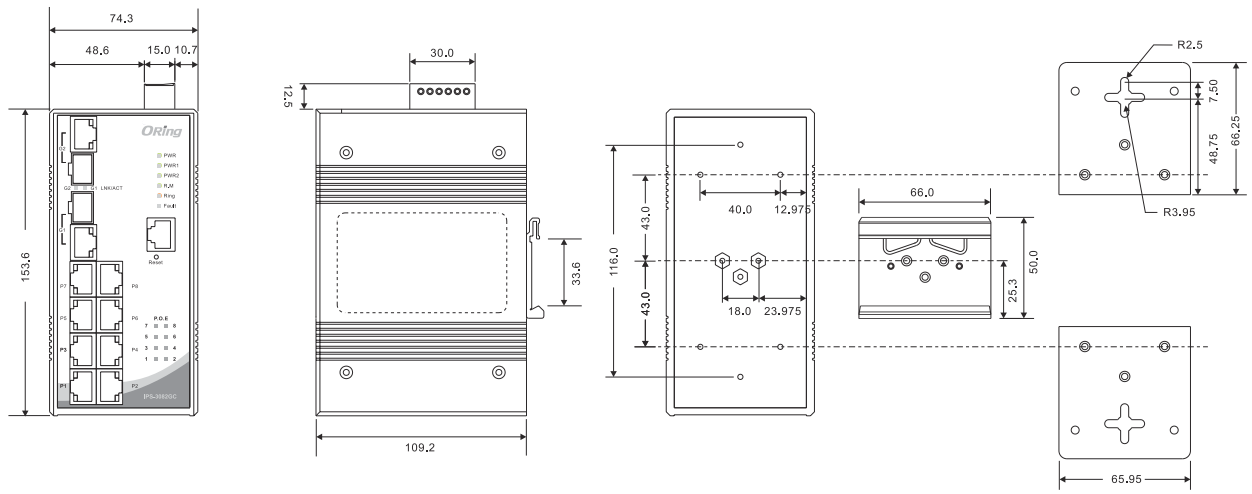




Topology View

Monitoring and Configuration interface

Dimensions



(Unit=mm)

PoE Pin Definition

RJ-45 Pin Definition	
Pin No.	Description
#1	TD+ with PoE Power input +
#2	TD- with PoE Power input +
#3	RD+ with PoE Power input -
#6	RD- with PoE Power input -

Specifications

ORing Switch Model	IPS-3082GC-24V
Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX with P.S.E.	8
Gigabit Combo Ports with 10/100/1000Base-T(X) and 100/1000Base-X SFP port	2
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T 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) IEEE 802.3af PoE specification (up to 15.4 Watts per port for P.S.E.)
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching latency: 7 µs 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
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 Support ModbusTCP Port Trunk support MVR (Multicast VLAN Registration) support
Network Redundancy	O-Ring Open-Ring STP RSTP MSTP MRP
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
DDM Function	Voltage / Current / Temperature
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 9600bps, 8, N, 1
LED Indicators	
Power /PoE Indicator	Green : Power LED x 3, Green : PoE LED x 8
O-Ring Indicator	Green : Indicate system operated in O-Ring mode

R.M. Indicator	Green : Indicate system operated in O-Ring Master mode
Fault Indicator	Amber : Indicate unexpected event occurred
10/100Base-T(X) RJ45 Port Indicator	Green for port Link/Act. Amber for Duplex/Collision
10/100/1000Base-T(X) RJ45 Port Indicator	Green for Link/Act. Amber for 100Mbps indicator
100/1000Base-X Fiber Port Indicator	Green for port Link/Act.
Fault contact	
Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Redundant Input Power	Dual DC inputs. 24 ~ 36VDC on 6-pin terminal block
Power Consumption (Typ.)	11.52Watts (power consumption of P.S.E. is not included)
Overload Current Protection	Present
Reverse Polarity Protection	**NOT Present**
Physical Characteristics	
Enclosure	IP-30
Dimensions (W x D x H)	74.3(W)x109.2(D)x153.6(H) mm (2.93 x 4.3 x 6.05 inch.)
Weight (g)	1260 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
Warranty	5 years

Ordering Information

IPS-3 AA B CC -24V

Code Definition	10/100Base-T(X) P.S.E. Port Number	Additional Port Number	Additional Port Type
Option	**- 08:** 8 ports	**- 2:** 2 ports	**- GC:** Gigabit combo with SFP

	Model Name	Description
Available Model	IPS-3082GC-24V	Industrial 10-port managed PoE Ethernet switch with 8x10/100Base-T(X) P.S.E. and 2xGigabit combo ports, SFP socket,24V power inputs

Packing List

- IPS-3082GC-24V
- DIN-Rail Kit
- Wall-mount Kit
- Console Cable
- ORing Tool CD
- Quick Installation Guide

Optional Accessories (Can be purchased separately)

- Open-Vision M500, Powerful Network Management Windows Utility Suite, 500 IP device
- SFP100 series, 100Mbps SFP optical transceiver
- SFP1G series, 1Gbps SFP optical transceiver
- DR-45-24 : 45 Watts@24VDC DIN-Rail power supply
- DR-75-24 : 75 Watts@24VDC DIN-Rail power supply
- DR-120-24 : 120 Watts@ee24VDC DIN-Rail power supply