

Quick Installation Guide

DES-3082GP-P

Industrial Managed Ethernet Switch

Introduction

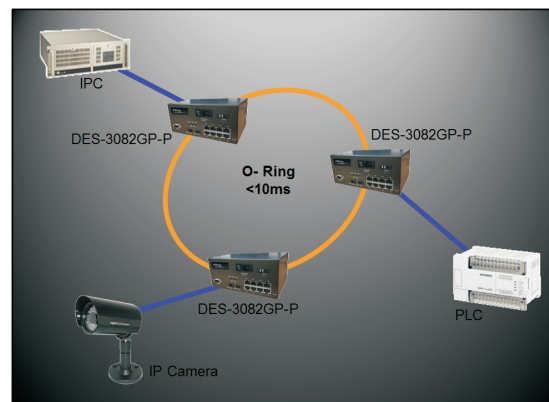
DES-3082GP-P is a desktop managed Redundant Ring Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X SFP ports. With completely support of Ethernet Redundancy protocol, O-Ring (recovery time < 10ms over 250 units of connection), Open-Ring, O-Chain and MSTP/RSTP/STP (IEEE 802.1s/w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. Another Open-Ring technology is also supported which can be 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. All function of **DES-3082GP-P** can be managed centralized and conveniently 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 choices for highly-managed Fiber Ethernet application.



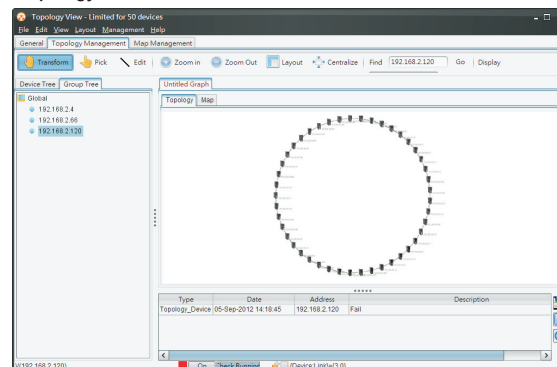
Open-Vision

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.

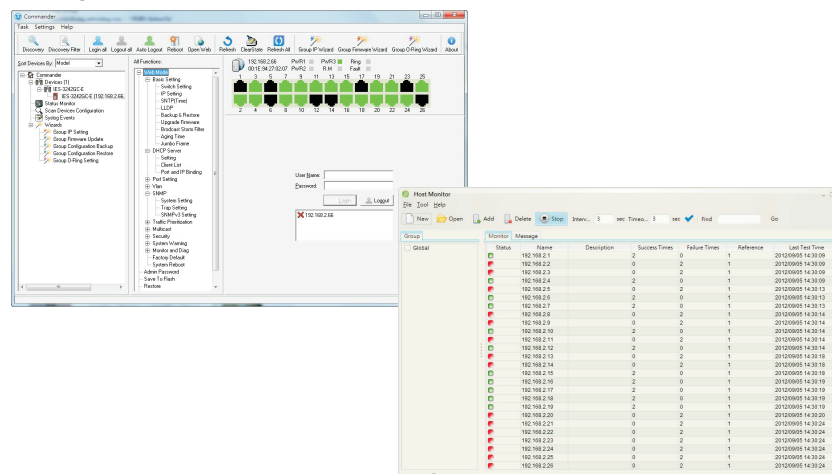
Network connection



Topology View



Configuration interface



Features

- > World's fastest Redundant Ethernet Ring: O-Ring (recovery time < 10ms over 250 units of connection)
- > Open-Ring support other vendor's ring technology in open architecture
- > 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
- > SNMP v1/v2c/v3 support for secured network management
- > RMON for traffic monitoring
- > 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

Specifications

ORing Switch Model	DES-3082GP-P
Physical Ports	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	8
100/1000Base-X SFP Port	2
Technology	
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-TX, 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)
MAC Table	8192 MAC addresses
Priority Queues	4
Processing	Store-and-Forward
Switch Properties	Switching latency: 7us 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 SNMPv3 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 250units Modbus/TCP supported QoS supported TOS/Diffserv supported Quality of Service (802.1p) for real-time traffic VLAN (802.1Q) with VLAN tagging and VGRP supported IGMP Snooping for multicast filtering Port configuration, status, statistics, monitoring, security SNTP for synchronizing of clocks over network Support PTP Client (recision Time Protocol clock synchronization) DHCP Server / Client support Port Trunk support 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 DB9 Female connector with console cable. 9600bps, 8, N, 1
LED Indicators	
Power indicator	Green: Power LED x 1
Status Indicator	Green: Status LED x 1
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 Fiber port indicator	Green for port Link/Act.
Fault Contact	
Relay	Relay output to carry capacity of 1A at 24VDC
Power	
Input power	100~240V AC
Power consumption(Typ.)	9 Watts
Overload current protection	Present
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	200 (W) x 130 (D) x 88 (H) mm (7.87 x 5.12 x 3.46 inches)
Weight (g)	1385 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

Quick Installation Guide

DES-3082GP-P

Industrial Managed Ethernet Switch

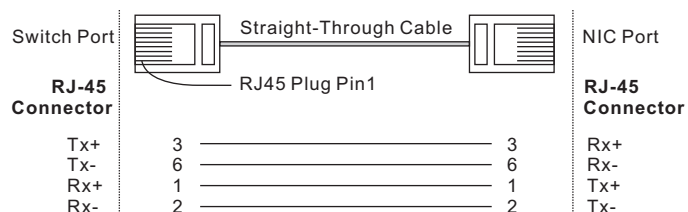
Communication Connections

10/100Base-T(X) Ethernet Port Connection

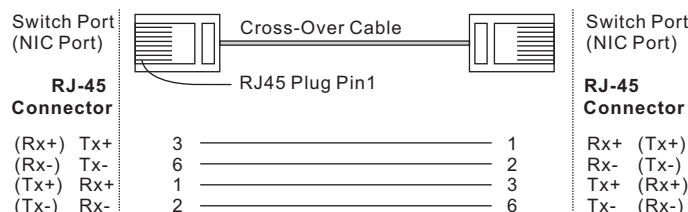
- RJ45 (8-pin, MDI) Port Pinouts
- RJ45 (8-pin, MDI-X) Port Pinouts



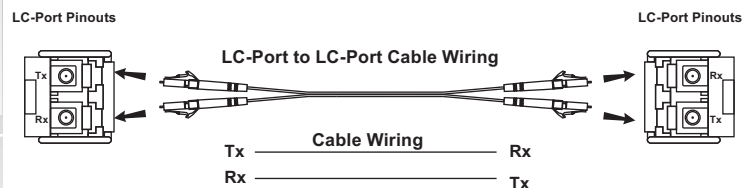
RJ45 (8-pin) to RJ45 (8-Pin) Straight-Through Cable Wiring



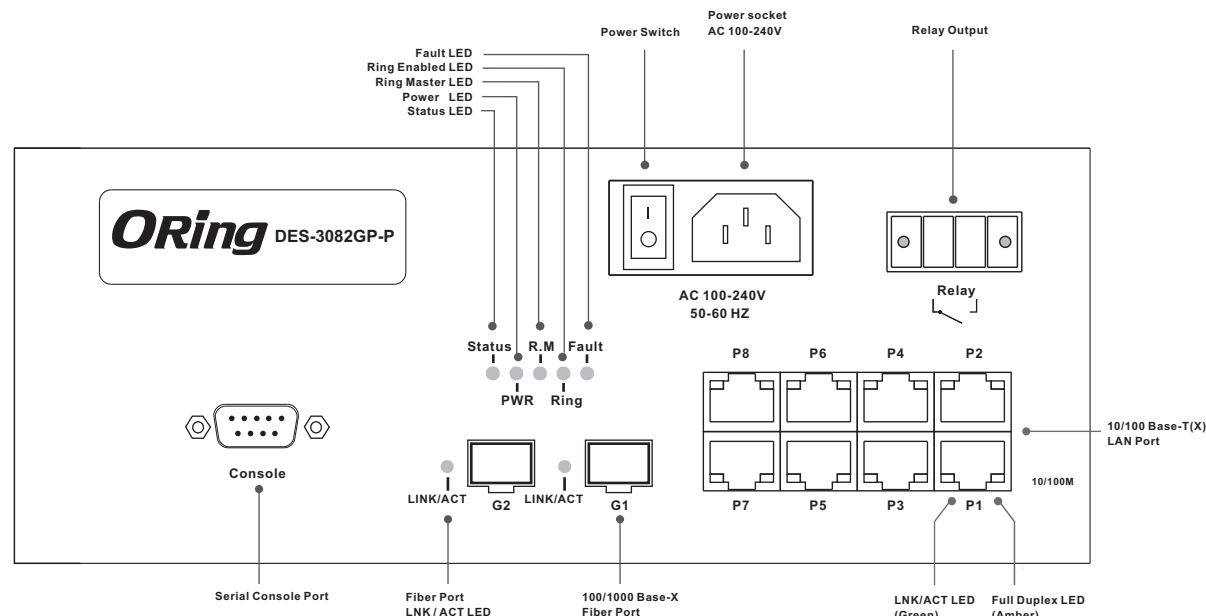
RJ45 (8-pin) to RJ45 (8-Pin) Cross-Over Cable Wiring



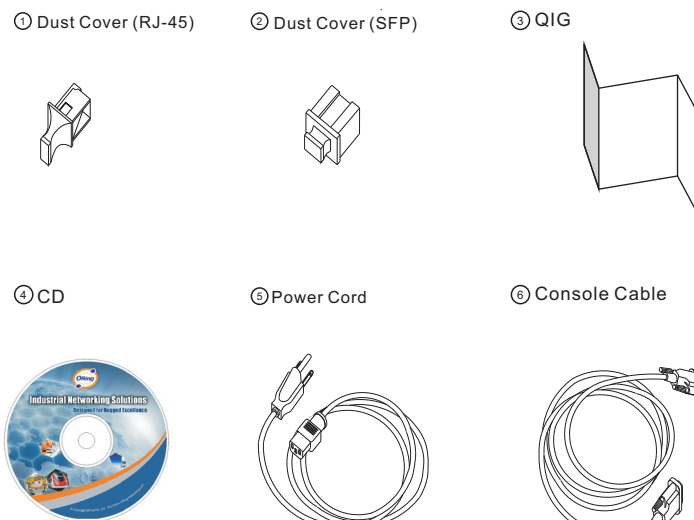
100/1000Base-X SFP Port Connection



Front Panel



Accessory



Packing list

Model Name	Model Description	Accessory
DES-3082GP-P_US	Industrial 10-port desktop managed bypass Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X, SFP socket, US power cord	⊗ X 8, ⊗ X 2, ⊗ X 1, ⊗ X 1, ⊗ X 1, ⊗ X 1
DES-3082GP-P_EU	Industrial 10-port desktop managed bypass Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X, SFP socket, EU power cord	⊗ X 8, ⊗ X 2, ⊗ X 1, ⊗ X 1, ⊗ X 1, ⊗ X 1

ORing ORing Industrial Networking Corp.

Copyright© 2013 ORing
All rights reserved.

TEL: +886-2-2218-1066 Website: www.oring-networking.com
FAX: +886-2-2218-1014 E-mail: support@oring-networking.com