DES-3082GP-AIO_S Series

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Industrial Ethernet Switch

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

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*NOTE** (Media Redundancy Protocol) function
- MSTP/RSTP:2004/STP(IEEE 802.1s/w/D)
- Provide optical bypass function
- Support Modbus TCP protocol
- Support IPV6 new internet protocol version
- Support PTP Client (Precision Time Protocol) clock synchronization
- Provided HTTPS/SSH protocol to enhance network security
- 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
- Support TACACS+ and 802.1x User Authentication for security
- 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
- Wall mounting enabled(optional)

O-Ring   Redundant PWR   Temperature -40~70°C

RoHS Lead Free   CE   FC

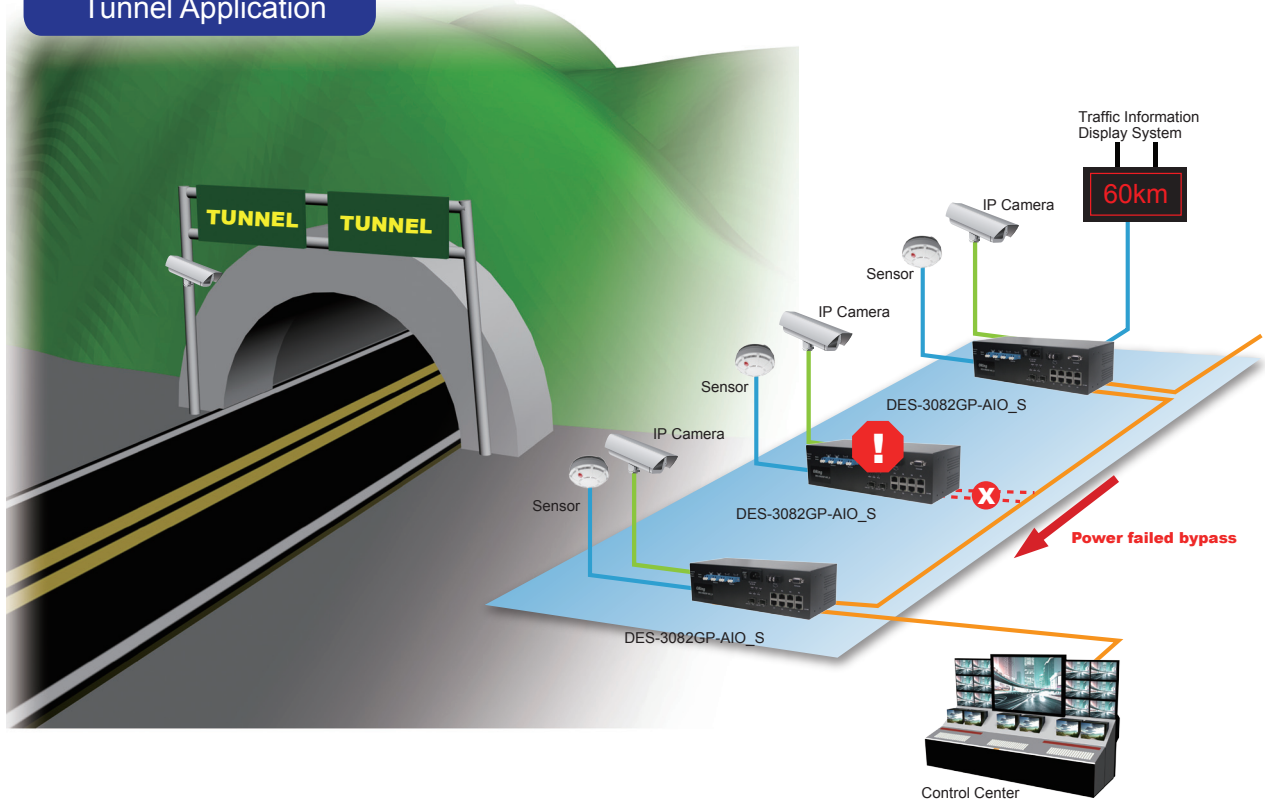***NOTE: This function is available by request only**

Introduction

DES-3082GP-AIO_S series are 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:2004/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.   DES-3082GP-AIO_S series includes 2 sets of bypass ports that protect the network from failures and Network maintenance by ensuring network integrity during power loss. DES-3082GP-AIO_S series 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 choices for highly-managed Fiber Ethernet application.
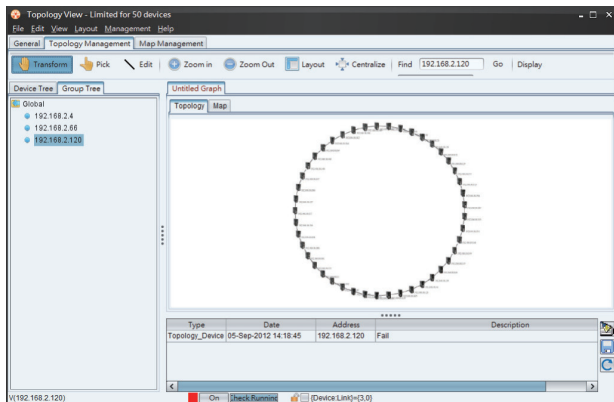
Open-Vision

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.

Tunnel Application

Network connection
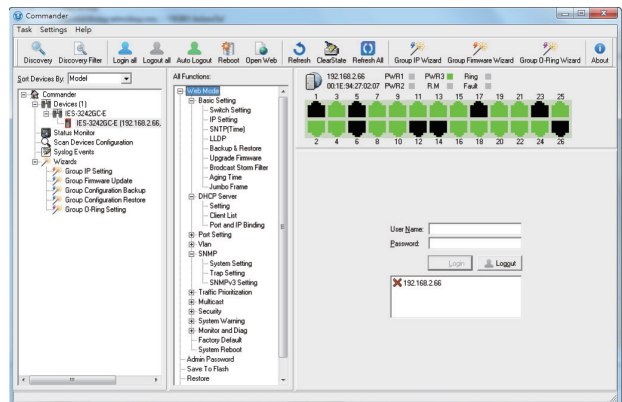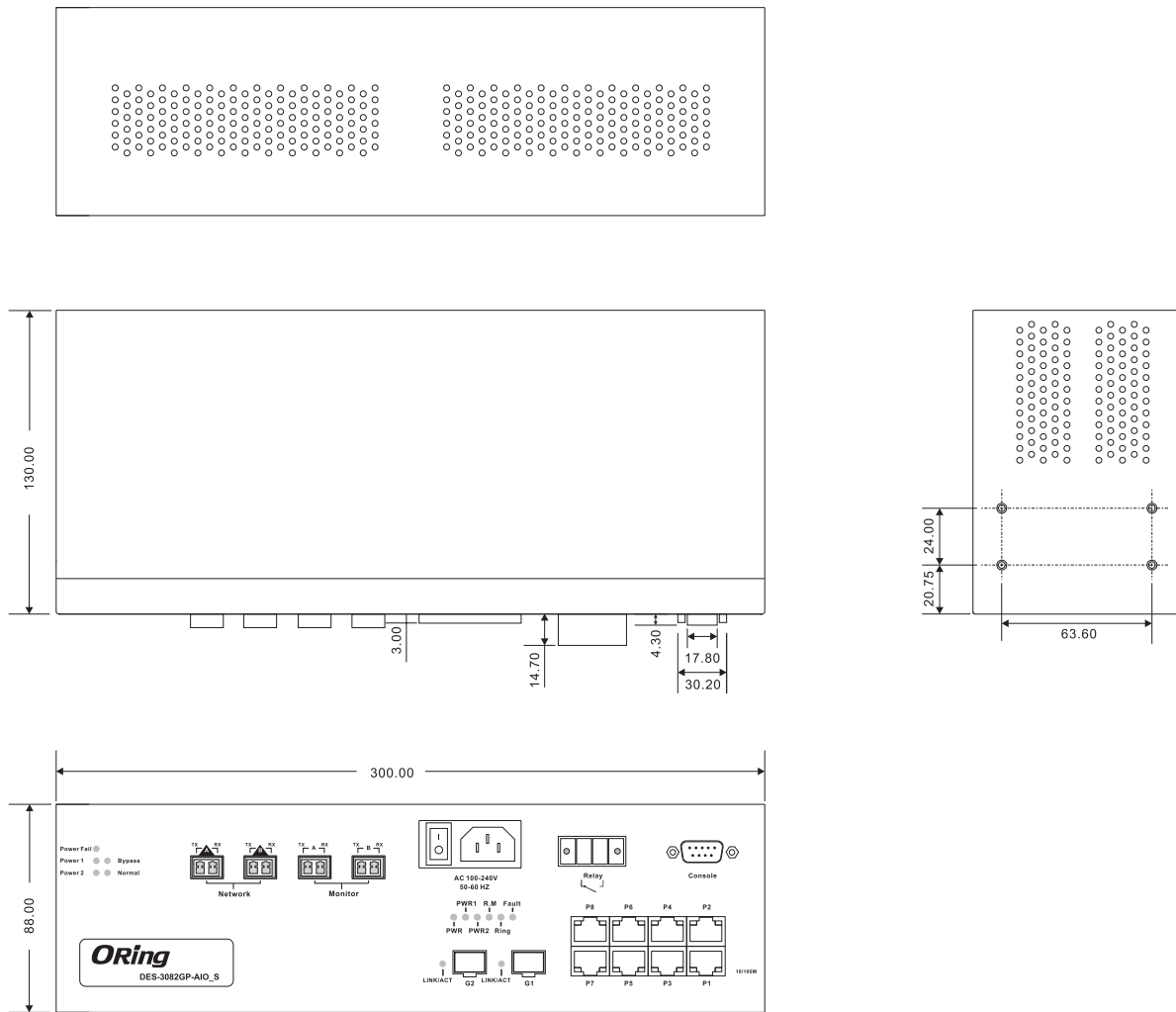

Topology View

Commander

Industrial Ethernet Switch

Industrial Media Converter

Industrial Device Server

Industrial Wireless Access Point

Industrial Cellular VPN Router

Industrial M2M Gateway

Accessories

Network Management Software

Dimensions

(Unit=mm)

Specifications

ORing Switch Model	DES-3082GP-SS-AIO_S	DES-3082GP-MM-AIO_S
Physical Ports		
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	8	
100/1000Base-X SFP Port	2	
LC Bypass Port Type	Single-Mode	Multi-Mode
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 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1D-2004 for RSTP:2004 (Rapid Spanning Tree Protocol 2004) 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 enhance network security
Software Features	STP/RSTP:2004/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 MVR (Multicast VLAN Registration) support Modbus TCP
Network Redundancy	O-Ring Ggiabit Combo Port with 10/100/1000Base-T(X) and 100/1000Base-X SFP ports Open-Ring O-Chain STP MRP***NOTE** RSTP:2004 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 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	Dual 100~240V AC power inputs in single power socket
Power Consumption (Typ.)	100VAC (24.2 Watts) / 240VDC (35.76 Watts)
Overload Current Protection	Present
Physical Characteristics	
Enclosure	IP-30
Dimensions (W x D x H)	300 (W) x 165 (D) x 88 (H) mm(11.18 x 6.5 x 3.47 inch)
Weight (g)	2350g
Environmental	
Storage Temperature	-40 to 85℃ (-40 to 185℉)
Operating Temperature	-40 to 70℃ (-40 to 158℉)
Operating Humidity	5% to 95% Non-condensing

*NOTE: This function is available by request only

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Industrial Cellular VPN Router

Industrial M2M Gateway

Accessories

Network Management Software

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

DES-3 AA B CC-DD-AIO_S

Code Definition	10/100Base-T(X) Port Number	Additional Port Number	Additional Port Type	Fiber Optical Mode
Option	**- 08 :** 8 ports	**- 2 :** 2 ports	**- GP :** Gigabit combo port100/1000Base-X SFP port	**- MM :** multi-mode **- SS :** single-mode

	Model Name	Description
Available Model	DES-3082GP-SS-AIO_S_US	Industrial 10-port desktop managed bypass Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X, SFP socket, single-mode LC connector bypass, US power cord
	DES-3082GP-SS-AIO_S_EU	Industrial 10-port desktop managed bypass Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X, SFP socket, single-mode LC connector bypass, EU power cord
	DES-3082GP-MM-AIO_S_US	Industrial 10-port desktop managed bypass Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X, SFP socket, multi-mode LC connector bypass, US power cord
	DES-3082GP-MM-AIO_S_EU	Industrial 10-port desktop managed bypass Ethernet switch with 8x10/100Base-T(X) and 2x100/1000Base-X, SFP socket, multi-mode LC connector bypass, EU power cord

Packing List
- DES-3082GP-AIO_S
- Power Cable
- ORing Tool CD
- Quick Installation Guide

Optional Accessories (Can be purchased separately)
- Open-Vision M500 : Powerful Network
- Management Windows Utility Suit, 500 IP devices
- SFP100 series : 100Mbps SFP optical transceiver
- SFP 1G series : 1Gbps SFP optical transceiver
- Rack-Mount Kit (optional)