### Industrial 12-port managed Gigabit Ethernet switch with 8xGigabit combo ports and 4x1000Base-X, SFP socket

#### **Features**

- Support 8xGigabit combo ports and 4x1000Base-X SFP ports
- Support Jumbo frame up to 9K Bytes
- Supports O-Ring (recovery time < 20ms over 250 units of connection), MSTP/RSTP/STP (IEEE 802.1s/w/D) for Ethernet Redundancy
- Supports IP based bandwidth management
- Supports application based QoS management
- Supports IP police security function
- Supports DOS/DDOS auto prevention
- Supports DDM (Digital Diagnostic Monitoring) function (P1 ~ P8)
- IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
- Supports SNMP v1/v2c/v3, RMON and 802.1Q VLAN Network Management
- Support ACL, 802.1x User Authentication for security
- Multiple notification for warning of unexpected event
- Windows utility (Open-Vision) support centralized management and configurable by Web-based interface, Telnet and Console (CLI)
- Support LLDP Protocol
- Rigid IP-30 housing design
- DIN-Rail and wall mounting enabled

### Thunder | Rail

















#### Introduction

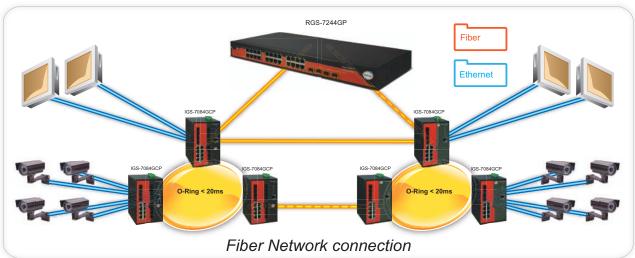
IGS-7084GCP is managed redundant ring Ethernet switch with 8xGigabit combo ports and 4x1000Base-X SFP ports. With completely support of Ethernet Redundancy protocol, **O-Ring** (recovery time < 20ms over 250 units of connection) and MSTP/RSTP/STP (IEEE 802.1s/w/D) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology. ORing's thunder switch series provide advanced IP base bandwidth management which can limit the maximum bandwidth for each IP device. User can configure IP camera and NVR with more bandwidth and limit other device bandwidth. ORing's thunder switch series also support application based QoS. Application based QoS can set highest priority for data stream according to TCP/UDP port number. ORing's special IP police function can permit only allowed IP address with MAC address to access the networking. Hacker cannot access the IP surveillance network without permission. It can avoid hacker from stealing video privacy data and attacking IP camera, NVR and controllers. ORing's thunder series switch also provided advanced DOS/DDOS auto prevention. If there is any IP flow become big in short time, ORing's thunder switch will lock the source IP address for certain time to prevent the attack. It's hardware based prevention so it can prevent DDOS attack without using CPU resource. And all functions of IGS-7084GCP can also be managed centralized and convenient by Open-Vision 3.0, Except the Web-based interface, Telnet and console (CLI) configuration. Therefore, the switch is one of the most reliable choice for highly-managed and Gigabit Fiber Ethernet application.

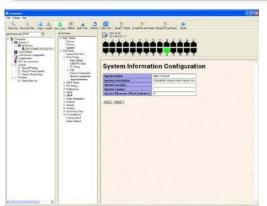
#### **Open-Vision**

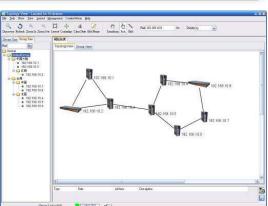
ORing's switches are intelligent switches. Different form other traditional redundant switches, ORing provides a set of Windows utility (Open-Vision) for user to manage and monitor all of industrial Ethernet switches on the industrial network.

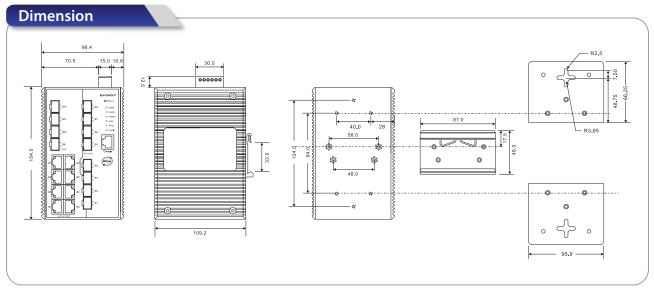
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1-105









(Unit=mm)

#### **Specifications**

ORing Switch Model	IGS-7084GCP
Physical Ports	
Ggiabit Combo Port with 10/100/1000Base-T(X) and 100/1000Base-X SFP ports	8
1000Base-X SFP Port	4

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2010\_Ethernet-Switch\_0830.indd 106 2010/9/3 上午11:16:14

1-107

# Specifications

Technology		
Ethernet Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T, IEEE 802.3ab for 1000Base-T, IEEE 802.3ad for LACP (Link Aggregation Control Protocol ) IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1D for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1x for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.1x for Authentication	
MACTable	8K	
Priority Queues	4	
Processing	Store-and-Forward	
Switch Properties	Switching latency: 7 us Switching bandwidth: 24Gbps Max. Number of Available VLANs: 4096 IGMP multicast groups: 128 for each VLAN Port rate limiting: User Define	
Jumbo frame	Up to 9K Bytes	
Security Features	EIP Police security feature Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1Q) to segregate and secure network traffic Radius centralized password management SNMPv3 encrypted authentication and access security	
Software Features	STP/RSTP/MSTP (IEEE 802.1D/w/s) Redundant Ring (0-Ring) with recovery time less than 20ms 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 IP based bandwidth management Application based QoS management DOS/DDOS auto prevention Port configuration, status, statistics, monitoring, security DHCP Client/Server	
Network Redundancy	O-Ring Open-Ring STP / RSTP compatible MSTP	
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 115200bps, 8, N, 1	
LED Indicators		
Power Indicator	Green: Power LED x 3	
R.M. Indicator	Green: Indicate system operated in 0-Ring Master mode	
Ring Indicator	Green: indicate system operated in 0-Ring mode	
Fault indicator	Amber : Indicate unexpected event occurred	
10/100/1000Base-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		

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2010\_Ethernet-Switch\_0830.indd 107 2010/9/3 上午 11:16:15

## **Specifications**

Power			
Redundant Input Power	Dual DC inputs. 12~48VDC on 6-pin terminal block		
Power Consumption (Typ.)	22 Watts		
Overload Current Protection	Present		
Reverse polarity protection	Present		
Physical Characteristic			
Enclosure	IP-30		
Dimension (W x D x H)	96.4 (W) x 108.5 (D) x 154 (H) mm (3.8 x 4.2.7 x 6.06 inch)		
Weight (g)	1420 g		
Environmental			
Storage Temperature	-40 to 85°C (-40 to 185°F)		
Operating Temperature	-10 to 60°C (-14 to 140°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**



Code Definition	Gigabit Combo Port Number	Additional Port Number	Additional Port Type
Option	- <b>08:</b> 8 ports	<b>- 4:</b> 4 port	<b>-GCP</b> : Gigabit combo + 1000Base−X SFP

Available	Model Name	Description
Model	IGS-7084GCP	Industrial 12-port managed Gigabit Ethernet switch with 8xGigabit combo ports and 4x1000Base–X, SFP socket

#### **Packing List**

· IGS-7084GCP x 1

• ORing Tool CD x 1

Quick Installation Guide x 1

• DIN-Rail Kit x 1

• Wall-mount Kit x 2

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-120 series : 120 Watts DIN-Rail power supply
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- SFP100 series : 100Mbps SFP optical transceiver
- SFP 1G series: 1Gbps SFP optical transceiver
- DR-75 series : 75 Watts DIN-Rail power supply

2010\_Ethernet-Switch\_0830.indd 108 2010/9/3 上午 11:16:1