Intelligent Transportation System

Build Secure Surveillance Systems with Gigabit Backbone Network

Legend:
- Optic Fiber
- Serial
- CAT5e
- Wireless LAN
- PoE Link

Diagram labels:
- IGPS-9042GP-24V
- IP Camera
- IGAP-W612H+
- IGAP-W612H+
- IGPS-9842GTP
- PET-102GT++
- IP Camera
- IP Camera
- IP Camera
- IP Camera
- IP Camera
- IGPS-9042GP-24V
- IP Camera
- Speed Sensor
- IGS-9812GP
- IGS-3032GC
- RGPS-92222GCP-NP
- IDS-312L
- IGPS-9084GP-LA
- Traffic Signal
- Central Control Room
- Traffic Information Display System
- IP Camera
- IPMC-111PB++-60W
- IDS-312L
- IGS-3032GC
- PTZ Camera

IPMC-111PB++-60W
DIN rail | Full Gigabit | 60W PoE

Industrial mini type Ethernet to fiber High power PoE++ media converter with 1x10/100Base-T(X) P.S.E. and 1x100Base-FX, SFP socket

- Support LFP (Link Fault Pass-through) function
- Supports full/half duplex operation
- P.S.E. fully compliant with IEEE802.3at standard, provide up to 60Watts

PET-102GT++
DIN rail | Full Gigabit | 90W PoE

Industrial 2-port Gigabit High Power PoE++ Extender

- PoE P.D. input support 90watts max.
- PoE P.S.E. output support 90watts max. per port
- Multiple unit , daisy-chain installation support
- High reliability and rigid IP-30 housing

IGPS-9842GTP
8 Ports | DIN rail | Full Gigabit | 30W PoE

Industrial 14-port managed Gigabit PoE Ethernet Switch

- Supports O-Ring / Open-Ring / O-Chain / MSTP
- Supports IEEE 802.3at/af compliant PoE with maximum 30Watts per port
- Supports PoE scheduled configuration and PoE auto-ping check function

IGS-9812GP
20 Ports | DIN rail | Full gigabit

Industrial 20-port managed Gigabit Ethernet Switch

- Supports O-Ring / Open-Ring / O-Chain / MSTP
- Supports IEEE 1588v2 clock Synchronization
- Supports IPV6 new internet protocol version
- Supports Modbus TCP protocol

IGPS-9084GP-LA
12 Ports | DIN rail | Full Gigabit | 30W PoE

Industrial 12-port managed Gigabit PoE Ethernet Switch

- Supports 8x10/100/1000Base-T(X) P.S.E. ports and 4x100/1000Base-X, SFP socket, Generic version
- Slim type and Rugged enclosure design
- Support PoE on/off scheduled configuration

IGPS-9042GP-24V
6 Ports | DIN rail | Full gigabit | 30W PoE

Industrial 6-port managed Gigabit PoE Ethernet Switch

- Fully compliant with IEEE 802.3af/at standard
- O-Ring & O-Chain (recovery time < 30 ms) supported
- IEEE 1588v2 clock synchronization supported

Overview

ORing Products Provide Dependable and Secure Network Infrastructure for IP Surveillance

Surveillance systems are essential visual supervision tools for maximum safety, efficiency, and productivity of our society. With the maturation of digital video and IP networking technologies, there is a mass movement of IP surveillance systems replacing traditional analog CCTV surveillance systems, as this movement is further accelerated by the recent advent of high definition digital video cameras.
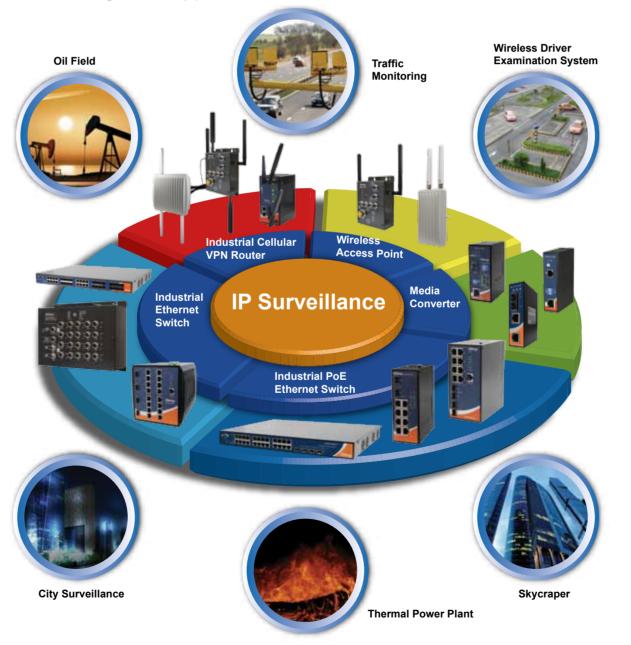
When compared to traditional analog CCTV surveillance systems, digital video IP surveillance systems offer better image quality without any worry of generational degradations, plus the unprecedented freedom and efficiency in viewing, transmission, and storage of surveillance video information.

While there are many advantages of digital video IP surveillance systems as mentioned above, there are technical issues or drawbacks that must be overcome to fully utilize the advantages of digital video IP surveillance systems:

1. Video privacy and security
2. Network stability
3. Network bandwidth headroom (especially for HD video surveillance systems)
4. Network management
5. Power consumption and management

Product Coverage and Applications

Application labels:
- Oil Field
- Traffic Monitoring
- Wireless Driver Examination System
- Industrial Cellular VPN Router
- Wireless Access Point
- Industrial Ethernet Switch
- **IP Surveillance**
- Media Converter
- Industrial PoE Ethernet Switch
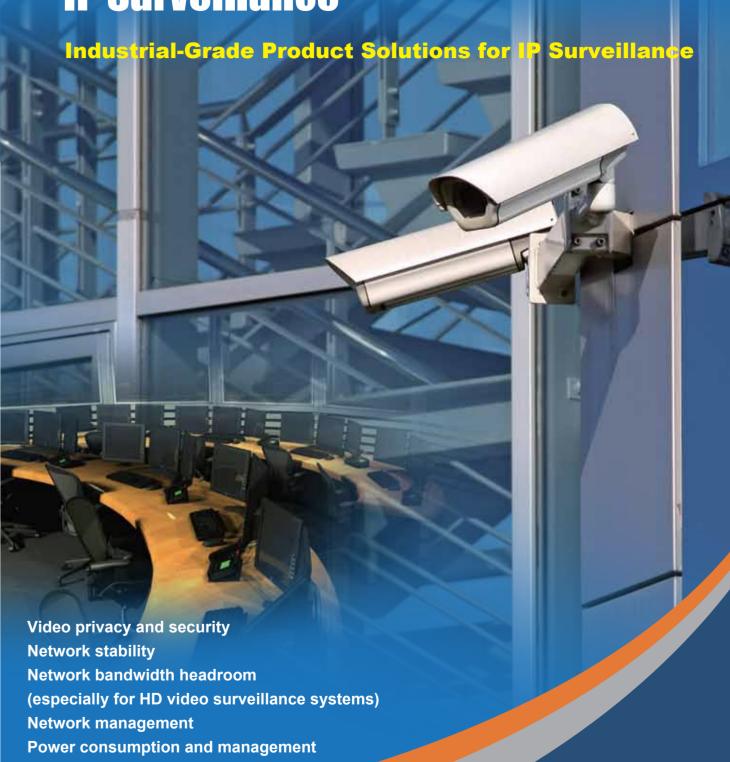- City Surveillance
- Thermal Power Plant
- Skycraper

ORing

3F., No.542-2, Zhongzheng Rd., Xindian Dist., New Taipei City 23148, Taiwan
Tel: +886-2-2218-1066 Fax: +886-2-2218-1014
Email:sales_all@ORingNet.com   www.ORingNet.com

2019.1

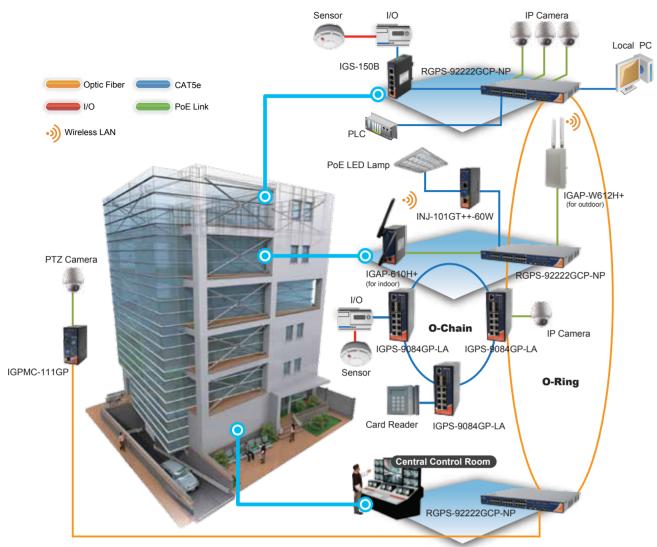# Providing Dependable and Secure IP Surveillance

Industrial-Grade Product Solutions for IP Surveillance

Video privacy and security
Network stability
Network bandwidth headroom
(especially for HD video surveillance systems)
Network management
Power consumption and management

ORing
www.ORingnet.com

Building Automation

Strengthen BA Systems with ORing Advanced Network Technologies

Legend:
- Optic Fiber
- I/O
- Wireless LAN
- CAT5e
- PoE Link

Labels in diagram: Sensor, I/O, IP Camera, Local PC, IGS-150B, RGPS-92222GCP-NP, PLC, PoE LED Lamp, IGAP-W612H+ (for outdoor), INJ-101GT++-60W, PTZ Camera, IGAP-610H+ (for indoor), RGPS-92222GCP-NP, I/O, O-Chain, IGPS-9084GP-LA, IGPS-9084GP-LA, IP Camera, O-Ring, Sensor, IGPMC-111GP, Card Reader, IGPS-9084GP-LA, Central Control Room, RGPS-92222GCP-NP

In-Vehicle Surveillance

Construct Reliable & Efficient IP Surveillance Systems

- CAT5e
- PoE Link
- Cellular Interface

Labels: IP Camera, TGAR-W1061+-3G-M12, IGPS-1082GP-24V, IP Camera, DVR, TGAR-W1061+-3G-M12

IGS-150B

`5 Ports` `DIN rail` `Mini type` `Full gigabit`

Industrial 5-port mini type unmanaged Gigabit Ethernet switch

- Supports auto-negotiation and auto-MDI/MDI-X
- Supports Jumbo Frame up to 9.6K Bytes
- Supports store-and-forward transmission
- Supports flow control

RGPS-92222GP-NP

`26 Ports` `Rack mount` `Full gigabit`

Industrial 26-port managed Gigabit PoE Ethernet switch

- Supports O-Ring / Open-Ring / O-Chain / MSTP
- Supports P.S.E. based on IEEE 802.3at standard up to 30 Watts per port
- Supports IPv6 new internet protocol version
- Supports Modbus TCP protocol

IGPMC-111GP

`DIN rail` `Full Gigabit`

Industrial Gigabit PoE Ethernet to fiber media converter with 1x10/100/1000Base-T(X) P.S.E. and 1x100/1000Base-X, SFP socket

- Support 1 port 10/100/1000Base-T(X) P.S.E. auto-negotiation and auto-MDI/MDI-X copper port
- Support 1 port 100/1000Base-X SFP fiber port
- P.S.E. fully compliant with IEEE802.3at standard, provide up to 30 Watts
- Support Jumbo Frame up to 9K Bytes

IGPS-1082GP-24V

`8 Ports` `24 VDC` `DIN rail` `Full gigabit`

Industrial 10-port unmanaged Gigabit PoE Ethernet switch

- Support 8 ports IEEE 802.3at compliant PoE and total power budget is 120W with maximum 30W per port of 24V model
- Support up to 9.6K Bytes Jumbo Frame
- Support up to 4Mbit Packet buffer

IPS-3082GC-24V

`10 Ports` `24 VDC` `DIN rail`

Industrial 10-port Managed PoE Ethernet Switch

- 8x10/100Base-T(X) P.S.E. and 2xGigabit Combo Ports, SFP Socket
- O-Ring / Open-Ring / O-Chain / MSTP / RSTP / STP Redundant Technology Supported
- Open-Ring supports other vendor's ring technology in open architecture
- Modbus TCP/IP Supported
- Dual 24VDC(12-57VDC) power inputs for power redundancy

IGAP-610H+

`DIN rail` `Full gigabit` `Wifi a/b/g/n`

Industrial IEEE 802.11 a/b/g/n high power wireless AP with 1x10/100/1000Base-T(X), PoE P.D, EU band

- 12~48VDC power input on terminal block
- 1 Gigabit Ethernet ports with 2KV isolation for PoE P.D.
- Support X-Roaming < 100 ms

IGAP-W612H+

`Full gigabit` `Wifi a/b/g/n`

Industrial outdoor IEEE 802.11 a/b/g/n wireless AP with 10/100/1000Base-T(X) PoE P.D., IP-67 grade, EU band

- High throughput > 180Mbps with HT40 2x2 MIMO
- High transmission power(27 dBm)
- Support X-Roaming < 100 ms

INJ-101GT++-60W

`DIN rail` `Full Gigabit` `60W PoE`

Industrial 1-port Gigabit High Power PoE++ Injector

- PoE++ Injector for 1x10/100/1000Base-T(X)
- Fully compliant with IEEE802.3at/802.3af standard
- Supports totallyPower Output up to 60Watts for all ports usage.
- Provided DIP switch configurator for PoE mode management

TGAR-W1061+-3G-M12

`3G Cellular` `Wall mount` `Dual RF`

Industrial EN50155 IEEE 802.11 a/b/g/n 3G Cellular Router

- Leading EN50155-compliant wireless access point for rolling stock application
- High Speed Air Connectivity: WLAN interface support up to 300Mbps link speed
- Secured Management by HTTPs
- IP table configurable to prevent access from unauthorized IP address

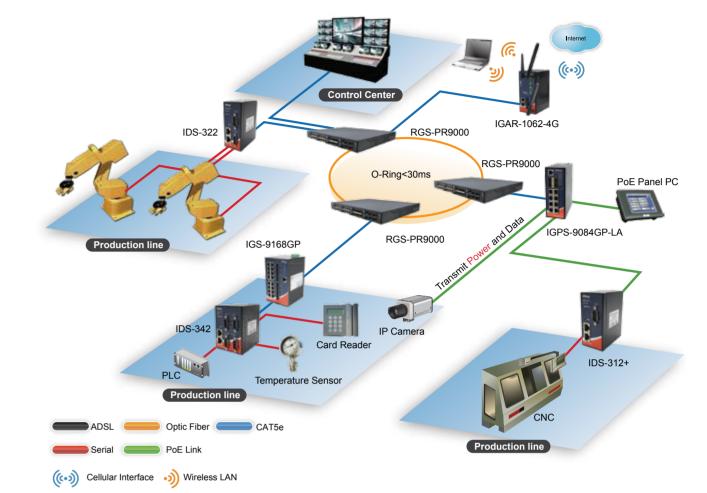## IGPS-1411GTP-24V

`5 Ports` `24 VDC` `DIN rail` `Full gigabit`

Industrial 6-port Unmanaged Gigabit PoE Ethernet Switch

- 4x10/100/1000-TX (P.S.E), 1x10/100/1000Base-T(X), and 1x100/1000Base-X, SFP Socket
- IEEE 802.3at compliant PoE Supported (max. 30 W/port)
- Dual 24VDC(12-57VDC) power inputs for power redundancy
- Rigid IP-30 Housing Design

Manufacturing Automation

Advance Industrial Communication into the Next Generation

Legend:
- ADSL
- Serial
- Cellular Interface
- Optic Fiber
- PoE Link
- Wireless LAN
- CAT5e

Labels: Control Center, IGAR-1062-4G, Internet, IDS-322, RGS-PR9000, RGS-PR9000, PoE Panel PC, O-Ring<30ms, IGPS-9084GP-LA, Production line, IGS-9168GP, RGS-PR9000, Transmit Power and Data, IDS-342, Card Reader, IP Camera, IDS-312+, PLC, Temperature Sensor, Production line, CNC, Production line

IDS-342(+)/322(+)/312(+)

`DIN rail` `Wall mount`

Industrial 4/2/1 secure serial port to Ethernet device server with 4/2/1xRS-232/422/485 and 2x10/100Base-T(X)

- Operating Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- Supports 4/2/1xRS-232/422/485 in DB9 connector
- Redundant multiple host devices:
  5 host devices: Virtual COM, TCP Server, TCP Client mode;
  4 IP ranges: UDP

IGAR-1062-4G

`2 Ports` `DIN rail` `LTE Cellular` `Full gigabit`

Industrial IEEE 802.11 a/b/g/n 4G LTE Cellular Router

- High Speed Air Connectivity: WLAN interface support up to 300Mbps link speed
- Supports 2 port 10/100/1000Base-T(X) port and 1 sim card slot
- 4G LTE Modem dial up included
- Supports HNAT enhance LAN to WAN routing performance

IGS-9168GP

`24 Ports` `Full gigabit` `DIN rail` `Wall mount`

Industrial 24-port managed Gigabit Ethernet switch

- Supports O-Ring (recovery time < 30ms over 250 units of connection) and MSTP(RSTP/STP compatible) for Ethernet Redundancy
- Supports IEEE 1588v2 clock Synchronization
- Supports Modbus TCP protocol

RGS-PR9000

`28 Ports` `Rack mount` `Full gigabit`

Industrial Layer-3 IEC 61850-3 modular rack mount managed Gigabit Ethernet switch

- Modular designed makes network planning easy
- Designed for power substation / Railway application and fully compliant with the requirement of IEC 61850-3 and IEEE 1613
- Supports IEEE 1588v2 clock Synchronization