## **Industrial Full Gigabit Ethernet Switch**

#### IGS-7084GCP

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



- Supports O-Ring/MSTP/RSTP/STP Ethernet redundant technology
- Supports ACL function and 9K Bytes jumbo frame
- Supports IP-based bandwidth management which can limit each IP device maximum bandwidth
- Supports application-based QoS and DOS/DDOS auto prevention function
- Supports SNMP v1/v2c/v3, IGMP v2/v3, VLAN, QoS (COS/TOS), GVRP, 802.1x and LLDP standard Ethernet protocol
- Provides Web-based, Telnet, Console (CLI) and powerful windows utility ~ Open-Vision v3.0 multi-configuration

#### IGS-1080A

Industrial 8-port slim type unmanaged Gigabit Ethernet switch with 8x10/100/1000Base-T(X)



- Supports Jumbo Frame up to 9K Bytes
- Relay output to carry capacity of 1A at 24 VDC
- Hardware DIP-switch to enable/disable warning function
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store-and-forward transmission

### **Industrial Gigabit PoE Ethernet Switch**

#### IGPS-7084GP

Industrial 12-port managed Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. and 4x1000Base-X, SFP socket



- Supports world's fastest 0-Ring Ethernet redundant technology and standard MSTP/RSTP/STP Ethernet redundancy
- Supports ACL function and 9K Bytes jumbo frame
- Supports IP based bandwidth management which can limit each IP device maximum bandwidth
- Supports application based QoS and DOS/DDOS auto prevention function
- 8 P.S.E. ports based on IEEE 802.3at standard up to 30 Watts per port supporting power consumption and scheduled management

#### **IGPS-1080A**

Industrial 8-port slim type unmanaged Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E.



- Provides 8x10/100/1000Base-T(X) PoE (P.S.E.) ports
- Supports P.S.E. based on IEEE 802.3at standard up to 30 Watts per port
- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store and forward transmission
- · Supports flow control

### **Industrial Rack-Mount Ethernet Switch**

#### RGS-7168GCP/7168GCP-E

Industrial 24-port rack-mount managed Gigabit Ethernet switch with 16xGigabit combo ports and 8x100/1000Base-X, SFP socket

Thunder

Thunder / Raci

*Thunder I POE* 

- Supports up to 24 full Gigabits SFP ports
- Supports O-Ring/MSTP/RSTP/STP Ethernet redundant technology
- Supports ACL function and 9K Bytes jumbo frame
- Supports IP-based bandwidth management which can limit each IP device maximum bandwidth
- Supports application-based QoS and DOS/DDOS auto prevention function
- Supports SNMP/RMON/VLAN/GVRP/QoS/IGMP/LACP/802.1x/DHCP/LLDP standard IEEE protocol
- Supports 100~240VAC power input and dual 36~72VDC power inputs(-E model)
- Supports Web-based ,Open-Vision v3.0, Telnet, Console (CLI) configuration

#### RGS-7244GP/7244GP-E

Industrial 28-port rack mount managed Gigabit Ethernet switch with 24x10/100/1000Base-T(X) and 4x1000Base-X, SFP socket

- Supports O-Ring/Open-Ring/MSTP/ RSTP/STP Ethernet redundant technology
- Supports SNMP/RMON/VLAN/GVRP/QoS/IGMP/LACP/ 802.1x/DHCP/LLDP standard IEEE protocol
- Supports IP-based bandwidth management which can limit each IP device maximum bandwidth
- Supports application-based QoS and DOS/DDOS auto-prevention function
- Supports 100~240VAC power input and dual 36~72VDC power inputs(-E model)
- Supports Web-based ,Open-Vision v3.0, Telnet, Console (CLI) configuration
- Supports Jumbo frame up to 9K Bytes

#### RGPS-7244GP/7244GP-P

Industrial 28-port rack-mount managed Gigabit PoE Ethernet switch with 24x10/100/1000Base-T(X) P.S.E. and 4X1000 Base-X

- Supports O-Ring/MSTP/RSTP/STP Ethernet redundant technology
- Supports SNMP/RMON/VLAN/GVRP/QoS/IGMP/ LACP/802.1x/DHCP/LLDP standard IEEE protocol
- Supports IP base bandwidth management which can limit each IP device maximum bandwidth
- Supports application-based QoS and DOS/DDOS auto-prevention function
- · Supports Web-based ,Open-Vision v3.0, Telnet, Console (CLI) configuration
- 24 ports support P.S.E. based on IEEE 802.3at standard up to 30 Watts per port and supports power consumption and scheduled management

#### RGPS-7084GP-P

Industrial 12-port rack-mount managed Gigabit PoE Ethernet switch with 8x10/100/1000Base-T(X) P.S.E. and 4x1000Base-X, SFP socket, power supply included

- Supports O-Ring (recovery time < 20ms over 250 units of connection) for Ethernet Redundancy
- Supports Jumbo frame up to 9K Bytes
- Supports IP-based bandwidth and application-based QoS management
- Supports IP police security function and DOS/DDOS auto prevention
- 8 port P.S.E. fully compliant with IEEE802.3at standard, provide up to 30Watts per port



### **Industrial Fast Ethernet Switch**

#### **IES-3240**

Industrial 24-port managed Ethernet switch with 24x10/100Base-T(X)



- Supports O-Ring/Open-Ring/O-RSTP/MSTP/RSTP/ STP Ethernet redundant technology
- Supports SNMP/RMON/VLAN/GVRP/QoS/IGMP/LACP/ 802.1x/PTP Client/DHCP/LLDP standard IEEE protocol
- Supports redundant dual 12 ~ 48VDC power inputs
- Event notification through Syslog, Email, SNMP trap, and Relay Output
- Web-based ,Telnet, Console (CLI), and Windows utility (Open-Vision) configuration

# Industrial Slim Type Ethernet Switch

#### IES-2042PA / IES-2050A

Industrial slim type lite-managed Ethernet switch

- Supports O-Ring/Open-Ring/RSTP/STP Ethernet redundant technology
- Supports SNMP/VLAN/DHCP/LLDP standard IEEE protocol
- Supports dual 12 ~ 48VDC redundant power inputs
- Web-based and Windows utility (Open-Vision) configuration
- Provides hardware DIP switch to set redundant ring functions



#### **IES-3162GC**

Industrial 18-port managed Ethernet switch with 16x10/100Base-T(X) and 2xGigabit combo ports, SFP socket



- Supports O-Ring/Open-Ring/O-RSTP/MSTP/RSTP/ STP Ethernet redundant technology
- Supports SNMP/RMON/VLAN/GVRP/QoS/IGMP/LACP/ 802.1x/PTP Client/DHCP/LLDP standard IEEE protocol
- Supports redundant dual 12 ~ 48VDC power inputs
- Event notification through Syslog, Email, SNMP trap, and Relay Output
- Web-based ,Telnet, Console (CLI), and Windows utility (Open-Vision) configuration

## **Industrial Mini Type Ethernet Switch**

#### **IES-150B**

Industrial 5-port mini type unmanaged Ethernet switch with 5x10/100Base-T(X)

- Supports auto-negotiation and auto-MDI/MDI-X
- Supports store and forward transmission
- · Supports flow control
- Supports dual 12 ~ 48VDC redundant power inputs
- · Mini size for easy installation



#### **IES-1240**

Industrial 24-port unmanaged Ethernet switch with 24x10/100Base-T(X)



- Supports Auto MDI/MDI-X switching function
- Provides Store-and-Forward switching architecture
- Provides 4.8Gbps Back-plane (Switching Fabric)
- · Warning system by relay output
- · Rigid IP-30 housing design

## **EN50155 Railway Ethernet Switch**

#### TES-3080-M12

Industrial EN50155 8-port managed Ethernet switch with 8x10/100Base-T(X), M12 connector

- Leading EN50155-compliant Ethernet switch for rolling stock application
- Supports O-Ring / Open-Ring / O-RSTP multi Ethernet redundancy technology
- Supports PTP Client (Precision Time Protocol) clock synchronization
- Windows utility (Open-Vision) support centralized management and configurable by Web-based, Telnet, Console, CLI
- M12 connectors to guarantee reliable operation against environmental disturbances



#### **IES-1162GC**

Industrial 18-port unmanaged Ethernet switch with 16x10/100Base-T(X) and 2xGigabit combo ports, SFP socket



- Provides 16x10/100Base-T(X) and 2xGigabit Combo ports
- Supports Auto MDI/MDI-X switching function
- SFP supports 1000Base-X Mode
- Provides Store-and-Forward switching architecture
- Provides 7.2Gbps Back-plane (Switching Fabric)
- · Supports 1M bits packet buffer

## **Optical Fiber Bypass Protection**

#### IBS-102FX

Industrial 2-port optical bypass switch for fiber optical network with 4xLC duplex

- Supports 100M/1G/10G optical bypass function of 2 port duplex or 4 port simplex fiber connection
- Bypass switching time < 10ms and Low insertions loss
- · Throughput not affected and no extra delay
- Dual Wide range power inputs: 12~48VDC
- Relay output for pwer failed warning



### **Industrial PoE Injector and Splitter**

#### INJ-102

Industrial 2-port Gigabit High Power PoE Injector with 2x10/100Base-T(X)



- Supports 2x10/100Base-T(X) for PoE power and data Output
- Fully compliant with IEEE802.3at/802.3af
- Auto protection for Over Voltage Power Input and over current output
- Supports Power Output up to 30Watts at 50VDC input
- IP-30 Rugged Case Design

#### SPL-101GT-AF/AT

Industrial Gigabit PoE Splitter with 1x10/100/1000Base-T(X)



- Fully compliant with IEEE802.3at/af standard
- Supports 10/100/1000Base-T(X) connection
- Power Isolation and Short Circuit Protection for Power Output
- Auto protection for Over Voltage Power Input
- Supports Power Outputs up to 30Watts (SPL-101GT-AT)
- IP-30 Rugged Case Design

#### **Industrial Media Converter**

#### IMC-121FB-MM/SS

Industrial mini type Ethernet to fiber media converter with 2x10/100Base-T(X) and 1x100Base-FX



- Supports 2 ports 10/100Base-T(X) auto-negotiation and auto-MDI/MDI-X
- 2x10/100 Base-T(X) ports to extend copper ports
- · High reliability and rigid IP-30 housing
- Supports dual 12 ~ 48VDC redundant power inputs
- Mini size for easy installation
- Very wide operating temperature range from -40 ~ 70°C and rigid IP-30 design for harsh operating environments

### **Industrial Media Converter**

#### IMC-111PB/IMC-111FB-MM/SS

Industrial mini type Ethernet to fiber media converter with 1 x 10/100Base-T(X) and 1 x 100Base-FX

- Supports 1 port 10/100Base-T(X) auto-negotiation and auto-MDI/MDI-X
- Supports LFP (Link Fault Pass-through) function
- Supports full/half duplex flow control and supports store and forward transmission
- Provided DIP-switch to setting and provide RJ-45 convert to SFP interface
- Very wide operating temperature range from -40 ~ 70°C and rigid IP-30 design for harsh operating environments



## **Industrial Rack-Mount Media Converter**

#### RMC-1000

Industrial Rack mount Ethernet to fiber media converter Chassis with 18 slots

- Supports 18 slots for media converter
- Each slot supports RMC-111PB/111FB/121FB series with 10/100Base-T(X) auto-negotiation and auto-MDI/MDI-X
- · Dual-power supply design for power redundancy
- Hot-swappable for Media Converters and power supplies
- 19-inch rack-mount enabled

## RMC-111PB RMC-111FB-MM/SS

Industrial Rack mount card type Ethernet to fiber media converter with 1x10/100Base-T(X) to 1x100Base-FX

- Supports LFP (Link Fault Pass-through) function
- Supports full/half duplex operation and store and forward transmission
- Provided DIP-Switch to setting function
- · Hot-swappable, High reliability and easy installation
- Up to 18 slot high density installation in RMC-1000 chassis on the 19-inch rack



## ISC-4110U / 8110U

Industrial 1-port USB to 4-port/8-port RS-232 serial media converter



- Fully compliant with USB specification 2.0
- RS-232 supporting RTS/CTS, DSR/DTR handshake signals
- Baud rate up to 921.6Kbps
- Dual redundant external DC power inputs on terminal block and power jack
- USB bus powered with Ultra low power consumption
- · Highly space-saving for installation

#### RMC-121FB-MM/SS

Industrial Rack mount card type Ethernet to fiber media converter with 2x10/100Base-T(X) and 1x100Base-FX

- Supports 2 ports 10/100Base-T(X) auto-negotiation and auto-MDI/MDI-X
- Supports Ethernet to fiber port conversion for long distance communication
- Supports store and forward transmission
- Hot-swappable, high reliability and easy installation
- Up to 18 slot high density installation in RMC-1000 chassis on the 19-inch rack



#### **Industrial Device Server**

#### IDS-141A / 181A

Industrial 4-port /8-port slim type secure serial to Ethernet device server with 4 or 8xRS-232 and 1x10/100Base-T(X)



- Versatile Modes: Virtual Com, Serial Tunnel, TCP Server, TCP Client, UDP
- NAT-pass through: user can manage IDS-141A/181A through NAT router
- Security: secured management by HTTPS and SSH access, IP Black List
- Event Warning by Syslog, Email, SNMP trap and relay output
- Configurable by Web-based and Windows utility (DS-Tool)

#### **Industrial Wireless Access Point**

## IAP-120 / 120+ IAP-320 / 320+

Industrial wireless access point with 2x10/100Base-T(X)



- Highly Security Capability: WEP/WPA/WPA- PSK (TKIP,AES)/ WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- Supports AP/Bridge/Repeater/AP-Client Mode
- Supports X-Roaming < 100 ms
- Supports wireless load balance
- Fully Compliant with IEEE802.3af (Power Device at ETH2, IAP-120+/320+)

#### IAP-6701N-WG+ / WA+

Industrial outdoor wireless access point with 1x10/100BaseT(X) PoE P.D., IP-67 grade, N-type antenna connector



- Supports IEEE802.3 b/g or a wireless LAN and specifically designed for the toughest industrial environments
- Supports IP-67 outdoor waterproof stand and is fully compliant with IEEE802.3af PoE P.D. function
   Various kinds of operation modes supported
- Various kinds of operation modes supported: AP/Bridge/Repeater/AP-Client/Client mode
- Supports X-Roaming and wireless load balance for mobile communication
- Supports external N-Type antenna connection
- Event warning by Syslog, E-mail and SNMP trap

#### IAP-W510 / W512

Industrial outdoor IEEE 802.11 a/n wireless access point with 1x10/100Base-T(X), IP-67 grade



- Supports AP/Bridge/Repeater/AP-Client/Client Mode
- · High power output of 500mW
- Wide-range Power Inputs :12~68VDC
- Rigid IP-67 housing design
- Far Distance Air Connectivity up to 10 km
- WLAN interface supports up to 300Mbps link speed

### **Industrial Wireless Cellular VPN Router**

## IAR-120 / 120+ IAR-320 / 320+

Industrial IEEE 802.11 Cellular VPN router

- Highly Security Capability: WEP/WPA/WPA-PSK (TKIP,AES)/ WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- USB interface supports external 3.5G HSDPA USB Modem dial-up
- Supports HTTPs/STP/PPPoE/VPN/NAT/DHCP/ SNMP Trap function
- 1KV isolation for PoE P.D. port of IAR-320+



#### **Industrial Cellular VPN Router**

#### **IR-711UB**

Industrial Cellular VPN router with 1x10/100Base-T(X) and 1xUSB 2.0 host

- Provides 1 x 10/100Base-T(X) port and 1 x USB 2.0 port
- USB interface supports 3.5G HSDPA USB Modem dial-up
- Secured Management by HTTPS
- IP table to prevent access from unauthorized IP address
- Supports VPN Setting (Open VPN, PPTP VPN)



## **EN50155 Wireless Access Point and Router**

#### TAP-3120-M12

Industrial EN50155 Transportation Dual IEEE 802.11 a/b/g wireless access point with 2x10/100Base-T(X), M12 connector

- Leading EN50155-compliant wireless access point for rolling stock application
- Provides dual RF which support IEEE 802.11
   a/b/g dual band for wireless communication
- Use M-series connectors to ensure tight, robust connections
- Dual redundant Ethernet ports support Ethernet redundant mode
- Dual Power Inputs on M23 connector



#### TAR-3120-M12

Industrial EN50155 Transportation Dual IEEE 802.11 a/b/g Cellular VPN router with 2x10/100Base-T(X), M12 connector

- Leading EN50155-compliant wireless access point for rolling stock application
- Dual Power Inputs on M23 connector
- Use M-series connectors to ensure tight, robust connections
- · 3.5G HSDPA Modem dial up included
- 3 modes of routing function: Dynamic/Static IP route, PPPoE authentication, and Cellular modem dial-up

