

## 14 Port Gigabit Managed Industrial Ethernet Switch



- ❁ 10-Port 10/100/1000Base-T + 4 (100/1000M) SFP L2 Plus Managed POE+ Switch
- ❁ L2+ features provide better manageability, security, QoS, and performance.
- ❁ Support L2+ Switching features including 802.1Q VLAN, Mirroring, Port isolation, IGMP Snooping, DHCP Snooping, LLDP, POE+ management, IP Source Guard, ARP inspection, ACLs etc.
- ❁ Support spanning tree STP(802.1D) and RSTP(802.1W).
- ❁ Jumbo frames support up to 9.6K kilobytes.
- ❁ Support enhanced management through WEB, CLI, TELNET, SSH, SNMP.
- ❁ Support cable diagnosis
- ❁ G.8032, support <50ms industrial quick ring protection
- ❁ Dual redundancy power input design for non-stop working.

### Product Description

This L2+ managed POE+ switch, provides a reliable infrastructure for your business network. It delivers more intelligent features you need to improve the availability of your critical business applications, protects your sensitive information, and optimizes your network bandwidth to deliver information and applications more effectively. It provides the ideal combination of affordability and capabilities for entry level networking of industrial, small business or enterprise application which demands industrial, surveillance, IP Phone, IP Camera or Wireless applications, thus helps you create a more efficient workforce.

In short, it provides security, performance, quality of services, central managed and other network control capabilities. Optimized and customized design and affordable pricing, it best fit for SMB or entry-level enterprise solution. It passed the rigorously testing to deliver excellent performance. As a managed switching solution, it also provides the flexibility to manage and prioritizes suitable-bandwidth traffic such as voice. In addition, it has advance security and gives you tight control to safeguard the network from unauthorized users.

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### Technical Specification

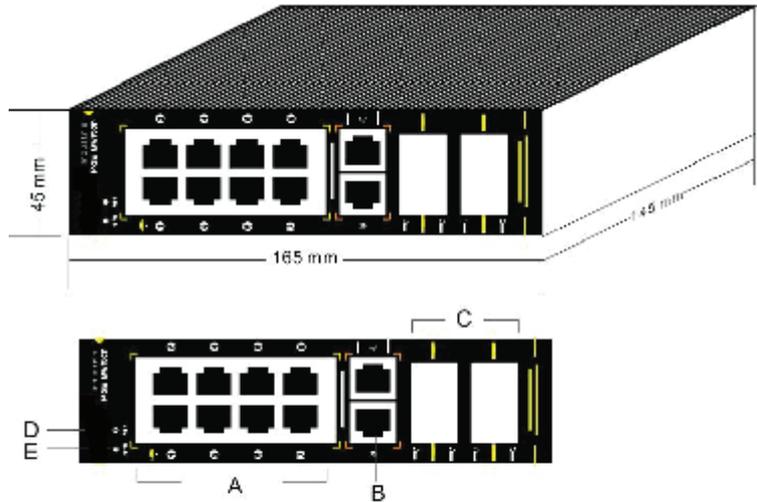
|                                                                     |                                                                                                                                                                                                                                                                                                                                               |  |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Product                                                             | <b>14-Port Managed Industrial Ethernet Switch (KRN-ISWM-0842G)</b>                                                                                                                                                                                                                                                                            |  |
| <b>Performance</b> (Switching capacity and forwarding rate)         |                                                                                                                                                                                                                                                                                                                                               |  |
| Capacity in Millions of Packets per Second (mpps) (64-byte packets) | 41.6                                                                                                                                                                                                                                                                                                                                          |  |
| Switching Capacity in Gigabits per Second (Gbps)                    | 52                                                                                                                                                                                                                                                                                                                                            |  |
| <b>Interface</b>                                                    |                                                                                                                                                                                                                                                                                                                                               |  |
| Ports                                                               | 10-Port 10/100/1000Base-T + 4 (100/1000M) SFP                                                                                                                                                                                                                                                                                                 |  |
| <b>Layer 2 Switching</b>                                            |                                                                                                                                                                                                                                                                                                                                               |  |
| Spanning Tree Protocol (STP)                                        | Standard Spanning Tree 802.1d<br>Rapid Spanning Tree (RSTP) 802.1w                                                                                                                                                                                                                                                                            |  |
| G.8032 ERPS                                                         | <50ms ring protection for industrial high reliable application                                                                                                                                                                                                                                                                                |  |
| Aggregation                                                         | Link Aggregation Control Protocol (LACP) IEEE 802.3ad; •<br>Up to 7 groups ;• Up to 14 ports per group                                                                                                                                                                                                                                        |  |
| VLAN                                                                | Support up to 4K VLANs simultaneously (out of 4096 VLAN IDs) ;• Port-based VLAN; • 802.1Q tag-based VLAN                                                                                                                                                                                                                                      |  |
| IGMP v1/v2 snooping                                                 | IGMP limits bandwidth-intensive multicast traffic to only the requesters; supports 1024 multicast groups (source-specific multicasting is not supported)                                                                                                                                                                                      |  |
| <b>Security</b>                                                     |                                                                                                                                                                                                                                                                                                                                               |  |
| Secure Shell (SSH) Protocol                                         | SSH secures Telnet traffic in or out the switch, SSH v1 and v2 are supported                                                                                                                                                                                                                                                                  |  |
| Secure Sockets Layer (SSL), HTTPS                                   | SSL encrypts the http traffic, allowing advance secure access to the browser-based management GUI in the switch                                                                                                                                                                                                                               |  |
| Port Security                                                       | Locks MAC Addresses to ports, and limits the number of learned MAC addresses                                                                                                                                                                                                                                                                  |  |
| DHCP Snooping                                                       | prevent unauthorized configuration and use of IP addresses, while providing support for IP Source Guard and ARP detection                                                                                                                                                                                                                     |  |
| IP Source Guard                                                     | Prevents datagram with spoofed addresses from being in the network                                                                                                                                                                                                                                                                            |  |
| ARP Inspection                                                      | Prevent ARP spoofing attacks and ARP                                                                                                                                                                                                                                                                                                          |  |
| Storm control                                                       | Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port                                                                                                                                                                                                                                          |  |
| ACLs                                                                | Support for up to 256 entries; Drop or rate limitation based on source and destination MAC, VLAN ID or IP address, protocol, port, differentiated services code point (DSCP) / IP precedence, TCP/ UDP source and destination ports, 802.1p priority, Ethernet type, Internet Control Message Protocol (ICMP) packets, IGMP packets, TCP flag |  |
| <b>Quality of Service</b>                                           |                                                                                                                                                                                                                                                                                                                                               |  |
| Hardware                                                            | Support 8 hardware queues                                                                                                                                                                                                                                                                                                                     |  |
| Scheduling                                                          | 8 COS queues per port support strict priority and weighted round-robin (WRR)                                                                                                                                                                                                                                                                  |  |

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| Classification                                                                                                                                                                                                                                                                          | Port based; 802.1p(PCP) VLAN priority based;                                                                                                                                                                                                                |
| Rate Limiting                                                                                                                                                                                                                                                                           | Ingress policer; egress shaping and rate control; per VLAN, per port and flow based                                                                                                                                                                         |
| <b>Management</b>                                                                                                                                                                                                                                                                       | (Web/ SSL, Telnet/ SSH, ping, Trivial File Transfer Protocol (TFTP), SNMP, Syslog)                                                                                                                                                                          |
| Web GUI interface                                                                                                                                                                                                                                                                       | Built-in switch configuration utility for browser-based device configuration (HTTP/ HTTPS). Supports configuration, system dashboard, maintenance, and monitoring                                                                                           |
| Dual Image                                                                                                                                                                                                                                                                              | Dual image provides independent primary and secondary OS files for backup while upgrading                                                                                                                                                                   |
| Firmware upgrade                                                                                                                                                                                                                                                                        | Web browser upgrade (HTTP/ HTTPS) and TFTP; • Upgrade through console port as well                                                                                                                                                                          |
| Port mirroring                                                                                                                                                                                                                                                                          | Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to <b>N-1 (N is Switch's Ports)</b> ports can be mirrored to single destination port. A single session is supported.                               |
| Other management                                                                                                                                                                                                                                                                        | Single IP management; HTTP/HTTPS; SSH; RADIUS; DHCP Client; SNTP; cable diagnostics; ping; syslog; Telnet client (SSH secure support)                                                                                                                       |
| <b>Green Ethernet</b>                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                             |
| Green and Energy-saving Ethernet (EEE)                                                                                                                                                                                                                                                  | Compliant IEEE802.3az Energy Efficient Ethernet Task Force. Automatically turns off power on Gigabit Ethernet RJ-45 port when detecting link down or Idle of client. Active mode is resumed without loss of any packets when the switch detects the link up |
| Cable length detection                                                                                                                                                                                                                                                                  | Adjusts the signal strength based on the cable length. Reduces the power consumption for cables shorter.                                                                                                                                                    |
| <b>General</b>                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                             |
| Jumbo frames                                                                                                                                                                                                                                                                            | Frame sizes up to 9KB supported on Gigabit interfaces                                                                                                                                                                                                       |
| MAC Table                                                                                                                                                                                                                                                                               | Up to 8K MAC addresses                                                                                                                                                                                                                                      |
| <b>Discovery</b>                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                             |
| Link Layer Discovery Protocol (LLDP)                                                                                                                                                                                                                                                    | Used by network devices for advertising their identities, capabilities, and neighbors on a IEEE 802 local area network, principally wired Ethernet.                                                                                                         |
| <b>Minimum Requirements</b>                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                             |
| Web browser: Mozilla Firefox version 2.5 or later, Microsoft Internet Explorer version 6 or later;<br>Category 5 Ethernet network cable;<br>TCP/IP, network adapter, and network operating system (such as Microsoft Windows, Linux, or Mac OS X) installed on each computer in network |                                                                                                                                                                                                                                                             |
| <b>Environmental (preliminary)</b>                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                             |
| Dimensions                                                                                                                                                                                                                                                                              | 165x145x45mm                                                                                                                                                                                                                                                |
| Working Environment                                                                                                                                                                                                                                                                     | Operating temperature: -40 to 75 °C; Storage temperature: -40°C to 75 °C;<br>Operating humidity: 10% to 90% , relative, non-condensing                                                                                                                      |

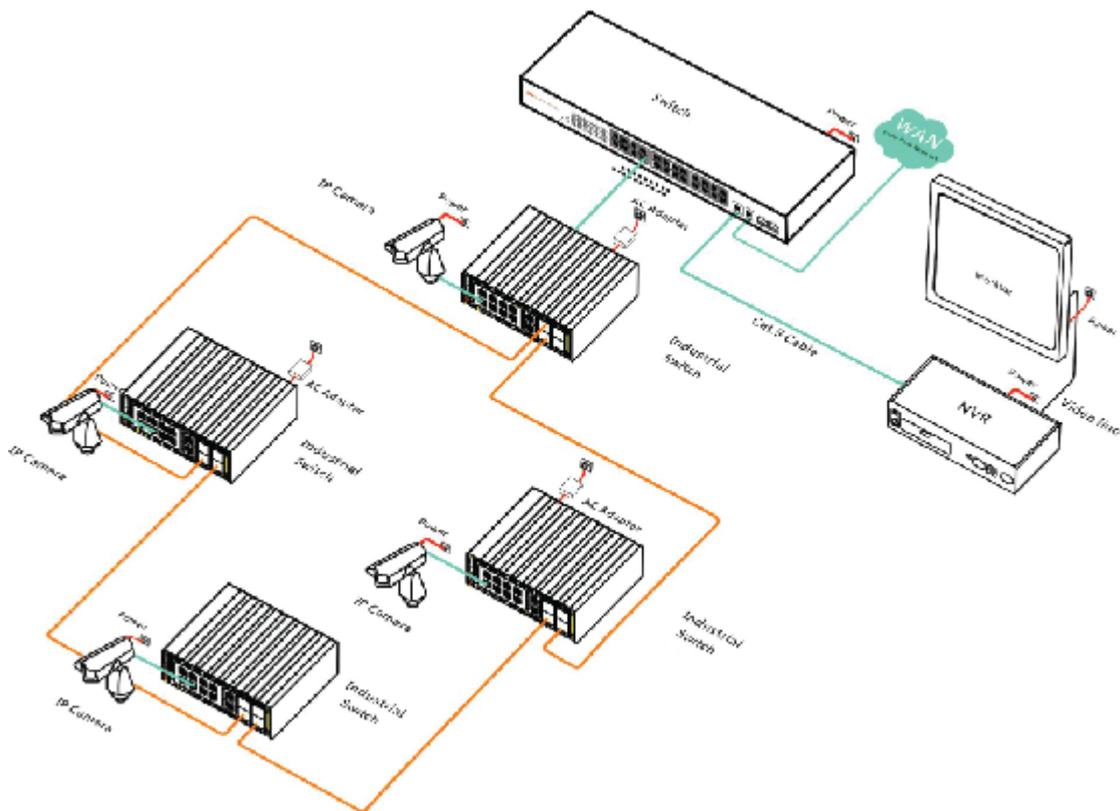
### 14 Port Gigabit Managed Industrial Ethernet Switch

#### Product Size Display



- A. RJ45 Ports
- B. Gigabit RJ45 Uplink
- C. Gigabit SFP Uplink
- D. Reset
- E. System Working Indicator

#### Product Application Display



## 14 Port Gigabit Managed Industrial Ethernet Switch

### Product Ordering Information

**Product Model:** KRN-ISWM-0842G

**Product Description:** 14-Port Gigabit Managed Industrial Ethernet Switch with 10-Port 10/100/1000Base-T + 4 (100/1000M) SFP slots, support Web management. Dual redundant power supply design. Ring network application is available.

### Product Packing Lists

|                      |                                                                     |
|----------------------|---------------------------------------------------------------------|
| <b>Packing Lists</b> | 14-Port Gigabit Managed Industrial Ethernet Switch (KRN-ISWM-0842G) |
|                      | User Guide                                                          |
|                      | Warranty Card                                                       |

**Note:** SFP module and power adapter is not included in this package. Please order it separately.