

## Technical Specifications

### Ethernet

- Operating mode: Store and forward, L2 wire-speed/non-blocking switching engine
- MAC addresses: 8K
- Jumbo frames: 9K Bytes\*

### Copper RJ45 Ports

- Speed: 10/100/1000 Mbps
- MDI/MDIX Auto-crossover: Support straight or cross wired cables
- Auto-negotiating: 10/100/1000 Mbps speed auto-negotiation; Full and half duplex

### SFP (Pluggable) Ports

- Port types supported:
  - SFP (pluggable) Ports 100/1000BaseSFP slot
  - Support 100/1000BaseT SFP transceiver

### Network Redundancy

- Fast failover protection rings:
  - Link loss recovery < 20ms
  - Support Single & Multiple rings; Ring coupling; Dual-homing; Chain
- Spanning Tree Protocol: IEEE 802.1D STP, IEEE 802.1w RSTP, IEEE 802.1s MSTP
- Port Trunk with LACP: Static trunk or Dynamic via LACP (Link Aggregation Control Protocol)

### Bridge, VLANs & Protocols

- Flow control: IEEE 802.3x (Full Duplex) and Back-Pressure(Half Duplex)
- Max VLANs: 1024
- VLAN Types:
  - Port-based VLANs; MAC-based VLANs; IP Subnet-based VLANs Protocol-based VLANs.
  - IEEE 802.1Q tag-based VLANs
  - IEEE 802.1ad Double Tagging (Q in Q)
- Multicast protocols:
  - IGMP v1, v2 with up to 255 multicast groups
  - IGMP snooping and querying, IGMP snooping v3
  - IPv6 over Ethernet
  - Support of IPv6 Multicast with MLDv1 and MLDv2
- LLDP: IEEE 802.1ab Link layer Discovery Protocol (LLDP)

### Traffic management & QoS

- Priority: IEEE 802.1p QoS
- Number of queues per port: 8
- Scheduling schemes: SPQ, WRR
- Traffic Shaper: port-based shaping

### Security

- Port security:
  - IP and MAC-based access control
  - IEEE 802.1X authentication Network Access Control
  - RADIUS and TACACS+ AAA (Authentication, Accounting and Authorization)
- Storm Control: Multicast/Broadcast/Flooding

### Management

- User Management interfaces:
  - CLI (command line interface), Console
  - WEB-based Management
  - SNMP v1, v2c, v3
  - Telnet

## L2-Managed Din-Rail Industrial Ethernet Switch

# DG-IS4508HP / DG-IS4512HP / DG-IS4514HP



### Product Features & Compliances:

- Provide 4 or 8 10/100/1000 Base TX PoE ports plus 2 or 4 100/1000BaseF SFP slots
- IEEE 802.3af 15.4W / IEEE 802.3at ,30W High Power PoE / IEEE 802.3bt, 60W Ultra PoE (port 1&2 of DG-IS4514HP only)
- Total PoE power budget: 120W (DG-IS4508HP) / 240W (DG-IS4512HP & DG-IS4514HP)
- 9K Jumbo frames
- L2 wire-speed switching engine
- 8K MAC forwarding addresses
- Network redundant LACP, Spanning tree STP, RSTP & MSTP, and quick Ring fail-over protection (< 20 ms)
- Port-based /tag-based VLAN, IEEE 802.1ad/QinQ VLAN, Add/remove VLAN tags,
- Multicasting support IGMP v1/v2, proxy & snooping
- Multicast/Broadcast/Flooding Storm Control
- IEEE802.1x access control
- CLI/Web/SNMP management interfaces
- Dual power input & Reverse power protection

## Technical Specifications

- Management Security:
  - HTTPs, SSH
  - Radius Client for Management
- Upgrade & Restore: FTP for Configuration Import/Export, FTP for Firmware Upgrade
- Diagnostic: Syslog
- MIBs:
  - RFC 1757 RMON 1,2,3,9; RFC 2674 Q-Bridge MIB
  - RFC-1213 MIB-II; RFC-1493 Bridge MIB; RFC 2233 IF MIB
- DHCP: Client, Server, Relay, Snooping, Option 82
- NTP/SNTP: Yes
- System status: Device info/status; Ethernet port status; PoE status
- PoE management: Scheduling; power control; PoE PD power consumption

### Power

- Power Input: Redundant Input Terminals
- Input voltage range: 46-57 VDC
- Total PoE output power budget:
  - 120W (DG-IS4508HP) /
  - 240W (DG-IS4512HP & DG-IS4514HP)
- PoE PSE port output power management: Scheduling; power control; PoE PD power consumption
- Reverse power protection: Yes
- Power consumption: 15W without PD loading

### Indicators

- Power Status indication: Indication of power input status
- Ethernet port indication: Link & Speed
- PoE status: Indication of PoE Power applying

### Environmental & Compliances

- Operating temperature range:
  - 40 to +75°C (cold startup at -40°C)
- Storage temperature range: -40 to +85 °C
- Humidity (non-condensing): 5 to 95% RH
- RoHS: RoHS (Pb free)
- MTBF: > 25 years

### Mechanical

- Ingress protection: IP30
- Installation option: DIN-Rail mounting, Wall mounting
- Dimension: 77mm(W) x 154mm(H) x 128mm(D)
- Weight: 1410 g

## Ordering Information:

DG-IS4508HP: DIGISOL industrial 8-port managed PoE switch with 4 Giga PoE ports & 2 Giga ports & 2 SFP ports

DG-IS4512HP: DIGISOL industrial 12-port managed PoE switch with 8 Giga PoE ports & 4 SFP ports

DG-IS4514HP: DIGISOL industrial 14-port managed PoE switch with 8 Giga PoE ports (Ports 1 & 2 supports Ultra PoE 60W) & 2 Giga ports & 4 SFP ports

\*\* Please refer warranty document on [www.digisol.com](http://www.digisol.com)

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