



HUG-418S
HUG-418SE

Features

- ✓ **High Performance Network Switching Technology**
- ✓ Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x
- ✓ Provides 4 x 10/100/1000 Mbps Ethernet ports with RJ-45 connector
- ✓ Provides 1 SFP slot
- ✓ RJ-45 Port support auto MDI/MDI-X crossover
- ✓ Provides broadcast storm protection
- ✓ Supports IEEE 802.3X flow control on full duplex, back pressure on half duplex
- ✓ **Robust Industrial Design**
- ✓ Robust Aluminum case complying to IP-30 housing standard
- ✓ Supports operating temperature -10 to 70°C & Extended temperature -40 to 80°C
- ✓ DIN-Rail, Panel mount or desktop installation
- ✓ High level of immunity to electromagnetic interference power supply surges typically found in industrial plant environments or external curb side enclosures
- ✓ **Reliable Power Design**
- ✓ Supports Redundant 12 - 48VDC power input
- ✓ Supports 4,000 VDC Ethernet ESD Protection
- ✓ Provides surge (EFT) protection 3,000 VDC for power line
- ✓ Power Polarity Reverse Protection
- ✓ Removable terminal block



Overview

The Husky Series HUG-418S Industrial 5-port Slim Unmanaged Gigabit Ethernet Switch is an entry-level industrial Ethernet switch that supports IEEE 802.3/802.3u/802.3x with 10/100/1000Mbps, full/half duplex and MDI/MDI-X auto-sensing RJ-45 ports. It supports state of the art design with four 10/100/1000T Ethernet ports and one small form pluggable (SFP) ports that supports Gigabit SX or LX depending on your existing network structure. The innovative SFP fiber slot design provides user the flexibility to insert different fiber modules, either multi-mode or single-mode at various distances, whether you require typical 10 km or overhaul 40 km, 80 km and 120 km distances. The compact, slim line switch is equipped with a relay output for an event alarm for easy troubleshooting. It offers a 12 to 48 VDC redundant powers input design and is secured with Power Polarity Reverse protection and an Overload Current Reset-table Fuse. The IP-30 housing protection, wide operating temperature of -10 to 70°C and DIN rail mounting makes HUG-418S suitable for an industrial environment. The E version extends the temperature rating to -40 to 80°C. The HUG-418S is a plug-and-play solution for your Industrial Ethernet applications.

Hardware Specifications

Interface

RJ-45 Ports: 4 10/100/1000Base-TX auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X

Fiber ports: 1 SFP slot

LEDs: Per unit: Power 1 (Green), Power 2 (Green), Fault (Red)
Per port: Link/Activity (Green), Speed (1000Mbps Green)
SFP: Link/Activity (Green)

Power Input: 12 to 48 VDC
Redundant power with removable terminal block

Power Protection: ESD (Ethernet)
Surge: 3000VDC
Power Reverse Polarity

Power Consumption: 4.8 watts

Dimensions: IP 30 standard, 30 mm (W) x 140 mm (H) x 95 mm (D)

Installation: DIN-Rail, panel mounting or desktop

Environmental

Operating Temp: Regular: -10 to 70°C
Extended: -40 to 80°C

Storage Temp: -40 to 85°C (-40 to 185°F)

Operating Humidity: 5% to 90% RH (non-condensing)

Technical Specifications

Standard:

IEEE 802.3 10Base-T Ethernet
IEEE 802.3u 100Base-TX
IEEE802.3ab 1000Base-T
IEEE802.3x Flow Control and Back Pressure

Connector:

10/100/1000TX: 4 x ports RJ-45 with Auto MDI/MDI-X function
Gigabit fiber: 1 x Mini-GBIC socket (Combo with 1000TX port)

Network Media:

10Base-T: 2-pair UTP/STP Cat. 3, 4, 5/ 5E cable
EIA/TIA-568 100-ohm (100m)
100Base-TX: 2-pair UTP/STP Cat. 5/ 5E cable
EIA/TIA-568 100-ohm (100m)
1000Base-TX: 2-pair UTP/STP Cat. 5/ 5E cable
EIA/TIA-568 100-ohm (100m)

Protocol Technology: CSMA/CD

Switching Architecture: Store and Forward

Performance

Data Transfer Rate:

14,880 pps for Ethernet port
148,800 pps for Fast Ethernet port
1,488,000pps for Gigabit Fiber Ethernet port

MAC Address: 8K

Jumbo Frame: 9Kbytes

Memory Buffer: 1Mbytes

Back-plane: 10 Gbps

Transfer Packet Throughput:
14.88Mpps @64bytes

Regulatory Approvals

EMI: FCC Class A

EMS:

EEN61000-4-2, EN61000-4-3, EN61000-4-4,
EN61000-4-5, EN61000-4-6, EN61000-4-8,
EN61000-4-11

Safety: UL, cUL, CE/EN60950

Shock: IEC60068-2-27

Vibration: IEC60068-2-6

Free Fall: IEC60068-2-32

Class 1 DIV 2: Pending

DNV: Pending

Environmental: WEEE, RoHS

MTBF: 350,000 hrs based on Mil-Hdbk-217F, GB

Warranty: 5 years