

# Industrial 10-port Gigabit Unmanaged Ethernet Switch with Fiber Port



**HUG-828**

## Features

- ✓ **High Performance Network Switching Technology**
- ✓ Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z
- ✓ Provides 8 x 10/100 Mbps Ethernet ports with RJ-45 connector
- ✓ Provides 2 combo ports
- ✓ RJ-45 Port support auto MDI/MDI-X crossover
- ✓ Provides broadcast storm protection
- ✓ **Robust Industrial Design**
- ✓ Robust Aluminum case complying to IP-31 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**
- ✓ Wide range redundant power design
- ✓ Equipped with redundant power inputs
- ✓ Supports 24 to 48VDC redundant power with polarity reverse protection
- ✓ Removable terminal block



## Overview

The Husky Series HUG-828 is a highly reliable and fault-tolerant Industrial 10-port Gigabit Unmanaged Ethernet Switch. It supports state of the art design with eight 10/100 Mbps Ethernet ports and two 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 10km or overhaul 40 km, 80 km and 120 km distances. The HUG-828 is equipped with a terminal block to provide dual power inputs with reverse polarity protection. Its IP-31 housing protection, wide operating temperature of -10 to 70°C and DIN-Rail mounting is suitable for an industrial environment. The E version extends the temperature rating to -40 to 80°C. The HUG-828 is a plug-and-play solution for your Industrial Ethernet applications.

## Hardware Specifications

### Interface

**RJ-45 Ports:** 8 10/100Base-TX auto-negotiation speed, Full/Half duplex, auto MDI/MDI-X

**Fiber ports:** 2 combo ports

**LEDs:** Per unit: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Yellow), Master (Green)  
 8 port 10/100: Link/Activity (Green), Full duplex/Collision (Yellow)  
 Mini GBIC: Link/Activity (Green)  
 Giga Copper: Link/Activity (Green), speed (1000 Green)

**Alarm:** Relay output for power failure  
 Current carry ability (1A at DC 24V)

**Power Input:** 24-48 VDC  
 Redundant power with removable terminal block

**Power Protection:** ESD (Ethernet)  
 Surge : 1500 VDC  
 Power Reverse Polarity

**Power Consumption:** 10 watts

**Dimensions:** IP-31 standard, 72 mm (W) x 152 mm (H) x 105 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  
 IEEE802.3z Gigabit fiber  
 IEEE802.3x Flow Control and Back Pressure

### 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

**Memory Buffer:** 4Mbytes

**System Log:** 1000 records

**Back-plane:** 5.6 Gbps

**Transfer Packet Throughput:**  
 14.88 Mpps @ 64 bytes

## Regulatory Approvals

**EMI:** FCC Class A

### EMS:

EN61000-4-2, 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:** 325,000 hrs based on Mil-Hdbk-217F, GB

**Warranty:** 5 years