# Industrial 8-port Managed Ethernet Switch with Fiber Port



HME-623 HME-623E

## Features

## High Performance Network Switching Technology

- Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.1p, IEEE 802.1q, IEEE 802.1d, IEEE 802.1w,
- ✓ Provides 6 x 10/100 Mbps Ethernet ports with RJ-45 connector
- ✓ Provides 2 x 100 Mbps single-mode SC type fiber port
- ✓ RJ-45 Port support auto MDI/MDI-X crossover
- ✓ Provides broadcast storm protection
- ✓ Redundant X-Ring recovery time < 300 ms on full load
  </p>
- ✓ Supports Dual Homing RSTP over X-ring
- SNMP for network management
- ✓ IGMP snooping for multicast traffic
- ✓ QoS / ToS to increase network packet determinism
- ✓ VLAN for easy network planning
- ✓ Event notification by e-mail, SNMP trap, Syslog & Relay output
- ✓ Online Port Mirroring for online debugging
- ✓ Supports IP security
- ✓ Configurable by WEB browser
- ✓ IntraVUE Network Management software compatible

## 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 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 12 to 48VDC redundant power with polarity reverse protection
- Removable terminal block



## Overview

The Husky Series HME-623 is a highly reliable and fault-tolerant Industrial 8-port Managed Ethernet Switch with six 10/100 Mbps Ethernet ports and two single-mode fiber ports. With the optic port, HME-621 transmits data at high speed for long distances up to 30 km with an SC connector. With its high performance switching device, HME-623 provides redundant self-recovery mechanism in less than 300ms on full load which allows you to establish a redundant Ethernet network to build a back-up ring topology. With powerful network management functions, HME-623 can be remotely configured by Web browser, and managed by SNMP. Event notification can be defined via SNMP trap, Syslog, Relay output or E-mail. Security is enhanced with advanced features like Port based VLAN, Tagged VLAN and IP security. Performance is optimized by Quality of Service and IGMP Snooping/querying. The HME-623 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 HME-623 is a plug-and-play solution for your Industrial Ethernet applications.

# Hardware Specifications

Interface

RJ-45 Ports: 6 10/100Base-TX auto-negotiation speed, Full/Half duplex,

auto MDI/MDI-X

Fiber Ports: 2 100Base-FX single-mode port (SC connector)

LEDs: Per port : Link/Activity (Green), Full duplex/Collision (Green)
Per unit: Power x 3 (Green), Fault (Red), R.M. (Orange)

**DIP Switch:** X-ring, Master, Port break alarm

**Alarm:** Relay output for port break and power failure

Power Input: VDC 12-48V

Redundant power with removable terminal block

Power Protection: Power Reverse Polarity

Power Consumption: 6.9 watts

**Dimensions:** IP-31 standard, 54 mm (W) x 135 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 Fast Ethernet

IEEE 802.3x Flow Control and Back-pressure

IEEE 802.1p Class of service

IEEE 802.1q VLAN

IEEE 802.1d Spanning Tree Protocol (STP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

#### **Network Media:**

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

MAC Address: 8K Memory Buffer: 1 Mbytes System Log: Supported Back-plane: 1.6 Gbps
Port Statistics: Supported

Flow Control: Full-duplex and Back Pressure for Half-duplex

Packet Filter: Broadcast/Multi-cast/Unknown Broadcast storm packet filter

Transfer Packet Throughput: 1.19Mpps @ 64bytes

# 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

## Management Specifications

Redundancy:

STP, RSTP Dual Homing, Ring Coupling

X-Ring with recovery time < 300ms

**Management Protocols:** 

SNMP v1/v2c, SMTP, SNTP, IGMP v1/v2 & Query mode, DHCP/Client, TFTP

MIB: MIB-II, Bridge MIB, Ethernet like MIB, VLAN MIB, Private MIB

Configuration:

Web interface management

Default button is available to restore default settings

VLAN:

Port Based VLAN

IEEE 802.1Q Tag VLAN (256 entries)

VLAN ID (Up to 4K, VLAN ID can be assigned from 1 to 4096.)

GVRP (256 Groups)\*

Double Tag VLAN (Q in Q)\*

Private VLĂN\*

**Quality of Service:** 

The quality of service determined by port, Tag and IPv4 Type of service, IPv4/IPv6 Different Service\* Port Mirroring: Support 3 mirroring types: "RX, TX and Both packet"

**IP Security:** 

Support 10 IP address accounts for system management security for Web,

SNMP and Telnet management security to prevent intruder.

**IGMP Snooping:** v1 and v2, query mode, multicast group with 256 entries

Class of Service: Support IEEE802.1p class of service,

per port provides 4 priority queues

**System Log:** Support System log record and remote system log server

**SNMP Trap:** Up to 3 Trap stations

Cold start, Port link up, Port link down, Authentication Failure, Private Trap for power status, Port Alarm configuration,

Fault alarm, X-Ring topology change

**DNS:** Provide DNS client feature and support Primary and Secondary DNS server\* **SMTP:** Support SMTP Server and 6 e-mail accounts for receiving event alert

**SNTP:** Support SNTP to synchronize system clock in Internet