Industrial 8-port Managed Ethernet Switch with Fiber Port

HME-621
HME-621E

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 multi-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
- √ 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-621 is a highly reliable and fault-tolerant Industrial 8-port Managed Ethernet Switch with six 10/100 Mbps Ethernet ports and two multi-mode fiber ports. With the optic port, HME-621 transmits data at high speed for long distances up to 2 km with an SC connector. With its high performance switching device, HME-621 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-621 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-621 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-621 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 multi-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 VLAN*

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 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