### The Direct Way to Industrial Ethernet

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# Husky

# Managed Gigabit Ethernet Series

HMG-828

## Overview



ETHERNET

The Husky managed Industrial Gigabit Ethernet Switch is a state of the art design support Gigabit transfer speed. HMG-828 supports 8 10/100TX plus two ports of 100/1000/Mini-GBIC. The pluggable SFP Mini-GBIC gives you the flexibility to mix and match fiber interfaces depending on your existing network structure. Web browser, SNMP, Telnet, CLI and menu driven management can remotely configure the wide range temperature combo managed industrial switch.

Husky managed switch supports X-ring self-recovery, which is more powerful than Super Ring mechanism that allows the switch to self-reconfigure and provide a redundant path in the network. In case any part of your network is disrupted or disconnected, the redundant feature allows a fault recovery time of less than 300ms to save your network from encountering interruption or failure.

To secure your network, the IP security function support 10 IP address accounts for system management security for Web, SNMP and Telnet management security to prevent intruder. Boasting advanced management features, HMG-627G supports Dual Homing and Ring Coupling.

#### **Key Features**

#### Hardware Feature

Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.3z, IEEE 802.3ad, IEEE 802.1p, IEEE 802.1Q, IEEE 802.1D, IEEE 802.1W, IEEE 802.1x

002.1D, TEEE 002.1W, TEEE 002.1X

RJ-45 Port support auto MDI/MDI-X function

Wide-range redundant power design

Store and forward switch architecture

DIN rail and 3-way wall mount design

#### Industrial Conformance

24 to 48V DC, redundant power with polarity reverse protection and terminal block for master and slave power

-10 to 70 Degrees C operation temperature

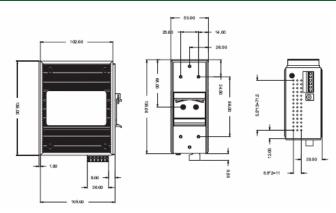
IP-31 standard Aluminum case

EMI complies with FCC Class A, CE EN6100-4-2, CE EN6100-4-3, CE EN6100-4-4, CE EN6100-4-5 and CE EN6100-4-6,

EN61000-4-8 and EN61000-4-11, EN61000-4-12

Stability testing with IEC60068-2-32(Free fall), IEC60068-2-27(Shock) and IEC60068-2-6(Vibration)

#### **Mechanical Dimension (in mm)**



Specifications	
Specifications	
Technology	-1
	IEEE802.3 10BASE-T
Standard	IEEE802.3u 100BASE-TX/100BASE-FX
	IEEE 802.3z Gigabit Fiber
	IEEE802.3x Flow Control and Back Pressure
	IEEE802.3ad Port trunk with LACP
	IEEE802.1d Spanning Tree Protocol IEEE802.1w Rapid Spanning tree
	IEEE802.1p Class of Service
	IEEE802.1Q VLAN Tagging
	IEEE 802.1x User Authentication (Radius)
RFC Standard	RFC2030 SNTP, RFC 2821 SMTP, RFC 1215 Trap, RFC2233 MIBII, RFC 1157 SNMP MIB,
	RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 2665 Ethernet like MIB,
	RFC 2819 RMON MIB, Private MIB
Protocol Toobhology	CSMA/CD
Protocol Technology Switching Architecture	Store and Forward
Switching Architecture	Broadcast packet filtering
Packet Filter	-Number of MAC (50 Tables)
	-IP Address Security (10 Sections)
Performance	
Internal Switching Capacity MAC Address	5.6Gbps
	8K 1Mbstop
Memory Buffer Back-plane	1Mbytes 5.6 Gbps
System Log	1000 records
Transfer packet size	8.3 Mpps at 64 bytes
Local configuration	RJ-45 for RS-232 series
Port Statistics	Supported
Flow Control	Full-duplex and Back Pressure for Half-duplex
Packet Filter	Broadcast/Multi-cast/Unknown Broadcast storm packet filter
Interface	
Number of Ports	8 x 10/100TX plus 2 10/100/1000/Mini-GBIC(Combo)
System Interface	Port Enable/Disable, Auto-Negotiation and Force speed, Full-duplex or Half-duplex mode
System interface	· · · · · · · · · · · · · · · · · · ·
Diagnostic LED	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 Cooper: Link/Activity (Green), speed (1000 Green)
	SX/SC (Multi Mode) : 50/125um to 62.5/125 um
Optical cable	LX/SC (Single Mode) : 9/125um to 10/125um
Distance & wavelength	SX : Distance 550 m, Wavelength 1310nm
	LX : Distance 10 km, Wavelength 1310nm
	Relay output for port break and power failure
Alarm	Current carry ability (1A at DC24V)
Power	
	24 ~48 VDC, Redundant power with polarity reverse protect function and connective removable terminal
Power Supply	block for master and slave power
Reverse Polarity Protection	Present
Power Consumption	9.54 Watts
Mechanical	
Case Dimensions (WxHxD)	IP 31 standard, 72(W) x 152(H) x 105(D) in mm
Mounting	DIN Rail and wall mount
Installation	Provide DIN rail kit and wall mount plate for 3-way installation
Environmental	

Operating Temperature	-10 deg C to 70 deg C
Storage Temperature	-40 deg C to 85 deg C (-40 degF to 185 deg F)
Operating Humidity	5%~90%RH (Non-condensing)
	5%~90%RH (Noll-colldensing)
Regulatory Approvals	
Emission	FCC Class A, CE EN6100-4-2, CE EN6100-4-3, CE EN-6100-4-4, CE EN6100-4-5, CE EN6100-4-6,
	EN61000-4-8, EN61000-4-11, EN61000-4-12
Safety	UL, cUL, CE/EN60950
Shock	IEC60068-2-27
Vibration	IEC60068-2-6
Free Fall	IEC60068-2-32
Management Features	
Redundancy X-ring	Provide X-ring, Dual Homing, and Couple Ring.
	Provide redundant backup feature and the recovery time below 300 ms
Management	Web/SNMP/Telnet/CLI/Menu Driven management
Management Protocols	SNMP V1/V2c/V3, RMON 1 (Statistics, History, Alarm, Events)
	SMTP, SNTP, IGMP V1/V2, DHCP/Client, DHCP Server, 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
	Support Port based VLAN/Tag VLAN(256 entries)
VLAN	VLAN ID(Up to 4K)
	GVRP(256 Groups)
	Static VLAN groups up to 256, the VLAN ID can be assigned from 1 to 4094.
Quality of Service	Hardware supports 4 queues per port
Port Mirroring	Online traffic monitoring on selected ports
MAC IP Security	- Supports ingress and egress MAC address filter and static source MAC address lock,
	Dumping MAC address Table
	- Ingress/Egress MAC address security, per port support learning 50 MAC addresses
IP Security	Support 10 IP address accounts for system management security for Web, SNMP and Telnet
	management security to prevent intruder.
Firmware update	By TFTP
IGMP Snooping	v1 and v2, multicast group with 256 entries
LACP Port Trunk	3 Trunk groups/Maximum 4 trunk members
Port Mirror	Global system supports 3 mirroring types: "RX, TX and Both packet".
	Maximum of 8 entries
Port Trunk	802.3ad with LACP function. Up to 3 trunk groups and maximum group member up to 4 ports
Class of Service (CoS)	Per port 4 queues
Quality of Service (QoS)	Port based/Tag based, IPv4 ToS, IPv6 Different Service
E-mail warning	Pre-defined events
SNMP Trap	Cold start, link down, link up, authorization fail, X-ring topology Change, Power alarm trap, Trap station
	up to 3
SMTP	Support up to 6 e-mail accounts

## **Ordering Information**

HMG-828 : Husky Industrial SNMP Combo Wide temperature managed 8 10/100TX plus 2 100/1000/Mini-GBIC Switch (-40 to 80 deg C operating temperature)