



## Overview

GE's Industrial Gigabit Ethernet Unmanaged Switch Series is now IFS. Designed to deliver non-blocking, triple-speed performance (10/100/1000Mbps), these unmanaged switches comprise a family of Industrial Ethernet Switches that can be deployed in harsh, heavy-industrial and curbside traffic control cabinet environments.

A 10Gbps or 16Gbps internal switch fabric, combined with 9K jumbo packet support, delivers high performance for large traffic volume and is ideal for linking to a backbone or high-capacity servers.

The IFS Industrial Gigabit Ethernet Unmanaged Switch Series utilizes a store-and-forwarding architecture to ensure low latency and high data integrity. This feature eliminates unnecessary data traffic and relieves congestion on critical network paths.

With an intelligent address recognition algorithm, the switches provide support for an 8K MAC address table to enable filtering and forwarding at full wire-speed. Flow-control capabilities add flexibility in network configuration, allowing integration of these switches with various switch-supported routers and servers.

# GE-DSG/DSGH Series

## 5-port and 8-port Industrial Gigabit Ethernet Unmanaged Switches

## Standard Features

### Physical Ports

- 10/100/1000Base-T
- 5 or 8 RJ-45 connectors
- Auto MDI/MDI-X
- Auto-negotiation complies with IEEE 802.3 10Base-T, IEEE 802.3u 100/Base-TX, IEEE 802.3ab 1000Base-T Ethernet standards

### Switch Architecture

- Store-and-forward switching architecture, broadcast storm control and runt/CRC filtering optimize network bandwidth by eliminating erroneous packets
- High performance switch fabric (10 or 16Gbps)
- Back pressure (half-duplex) and IEEE 802.3x PAUSE frame-flow control (full-duplex) to prevent packet loss
- Automatic address learning and address aging
- Integrated address-lookup engine with support for 8K absolute MAC address table
- Up to 176 kilobytes on-chip frame buffer
- 9K jumbo packet-size support
- CSMA/CD Protocol

### Robust Hardened Design

- Slim IP-30 metal case for protection
- Provides either DIN-rail or wall-mounting
- 12 to 48 VDC, redundant power with reverse-polarity protection
- Removable terminal block for master and slave power
- Alarm relay output for power-failure alert
- Voltage/surge-suppression
  - EFT 6000VDC protection for power lines
  - ESD 6000VDC protection for Ethernet
- Complies with IEC60068-2-xx standards for free-fall, shock and vibration
- Wide operating temperature range of -40° C ~ +75° C

### Warranty

- 3-year limited warranty



GE-DSGH-5  
5-Port Industrial Gigabit  
Ethernet Unmanaged  
Switch (-40~75°C)



GE-DSG-8  
8-Port Industrial Gigabit  
Ethernet Unmanaged  
Switch (-10~60°C)



GE-DSGH-8  
8-Port Industrial Gigabit  
Ethernet Unmanaged  
Switch (-40~75°C)

# Industrial Gigabit Ethernet Switch Specifications

North America  
 T 888-437-3287  
 F 503-691-7566  
 E sales@ifs.com

Asia  
 T 852-2907-8108  
 F 852-2142-5063

Australia and New Zealand  
 T 613-9239-1200  
 F 613-9239-1299

EMEA  
 T 44-113-238-1668  
 F 44-113-253-8121

Latin America  
 T 561-998-6100  
 F 561-994-6572

interlogix.com  
 utcfireandsecurity.com

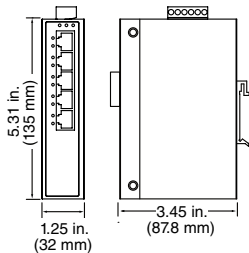
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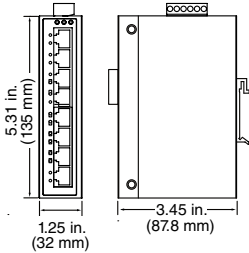
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 Farmington, CT 06034-4065




## Dimensional Diagrams

GE-DSGH-5



GE-DSGH-8/GE-DSG-8



Part No.	GE-DSGH-5	GE-DSGH-8	GE-DSG-8	
				
Physical Ports	<b>10/100/1000Base-T Ports</b>	RJ-45 (5)	RJ-45 (8)	
	<b>Port Configuration</b>	Auto MDI/MDI-X		
	<b>Port Speed</b>	Auto-negotiate 10/100Mbps (half/full-duplex) and 1000Mbps full-duplex mode		
	<b>Electro Static Discharge (ESD) Protection</b>	6KV		
Switch Performance	<b>Switch Processing</b>	Store-and-forward		
	<b>Mac Address Table</b>	8K entries		
	<b>Buffer</b>	136 kilobytes	176 kilobytes	176 kilobytes
	<b>Flow Control</b>	Back pressure for half-duplex, IEEE 802.3x Pause frame for full-duplex		
	<b>Switch Fabric</b>	10Gbps	16Gbps	16Gbps
	<b>Throughput (Packet per second)</b>	7.4Mpps@64Bytes	11.9Mpps@64Bytes	11.9Mpps@64Bytes
	<b>Jumbo Frame</b>	9Kbytes		
Standard Compliance	<b>IEEE Standards</b>	IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet IEEE 802.3ab Gigabit Ethernet IEEE 802.3x Full-duplex flow		
	<b>IEC Standards</b>	IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)		
	<b>EIA/TIA-568 Standards</b>	Cat. 3, 4, 5, 5e, 6 UTP cable (100meters, max.) EIA/TIA-568 100-ohm STP (100meters, max.)		
	<b>Regulation</b>	FCC Part 15 Class A, CE		
	<b>Safety</b>	UL, cUL		
LED Indicators	<b>Power</b>	Power input 1; Power input 2; Power Fault		
	<b>Ports</b>	10/100Mbps or 1000Mbps Transmission Activity		
Electrical & Mechanical	<b>Power Input</b>	12~48 VDC, Redundant power with polarity-reverse protection function		
	<b>Power Consumption</b>	11.9 Watts/40BTU	13.2 Watts/45BTU	13.2 Watts/45BTU
	<b>Electrical Fast Transient (EFT) Protection</b>	6KV		
	<b>Power and Alarm Fault Connector</b>	6-pin removable screw terminal		
	<b>Alarm Fault Relay</b>	30VDC – 3A max.		
	<b>Enclosure</b>	Metal (Meets IP-30 standard)		
	<b>Mounting</b>	DIN-rail kit and wall-mount ears (included)		
	<b>Dimensions (W) x (D) x (H)</b>	5.31" x 3.42" x 1.26" 135 x 87 x 32mm		
<b>Weight (lbs/kg)</b>	1.0 lbs	1.045 lbs	1.045 lbs	
Environmental	<b>Operating Temperature</b>	-40°C~75°C	-40°C~75°C	-10°C~60°C
	<b>Storage Temperature</b>	-40°C~75°C	-40°C~75°C	-40°C~75°C
	<b>Relative Humidity</b>	5% ~ 95% (non-condensing)		

## Ordering Information

GE-DSGH-5	5-Port Industrial Gigabit Ethernet Unmanaged Switch (-40~75°C)
GE-DSGH-8	8-Port Industrial Gigabit Ethernet Unmanaged Switch (-40~75°C)
GE-DSG-8	8-Port Industrial Gigabit Ethernet Unmanaged Switch (-10~60°C)

Note: External power supply must be purchased separately

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