



# 8-PORT GIGABIT INDUSTRIAL UNMANAGED SWITCH









# **OVERVIEW**

THE DGF-1500-08 GIGABIT SWITCH IS DESIGNED TO OPERATE IN INDUSTRIAL ENVIRONMENTS. WHETHER INSTALLED ON A FACTORY FLOOR OR A STREET CORNER, THE DGF-1500-08 PROVIDES FLAWLESS COMMUNICATION. THE DGF-1500-08 IS EQUIPPED WITH EIGHT GIGABIT PORTS SUPPORTING AUTO-NEGOTIATION, AUTO MDI/MDI-X AND JUMBO FRAME TECHNOLOGY. THE SWITCH DELIVERS RELIABLE DATA TRANSFER WITH FULL-WIRE SPEED TO MEET INCREASING NETWORK THROUGHPUT REQUIREMENTS. MOREOVER, THE DGF-1500-08 FEATURES A SHOCK RESISTANT HOUSING AND SUPPORTS OPERATING TEMPERATURES FROM -20°C TO 60°C. THE RUGGED CONSTRUCTION ALLOWS THE SWITCH TO BE INSTALLED IN THE HARSHEST ENVIRONMENTS WHILE AT THE SAME TIME OFFERING HIGH LEVELS OF PERFORMANCE.

# **FEATURES**

Compliance with IEC61000-6-2 EMC Generic standard immunity for Industrial environment 8192 MAC addresses 144K Bytes buffer memory 1000Mbps: Full-duplex, 10/100Mbps: Full/Half-duplex Auto-Negotiation and Auto MDI/MDI-X Full wire-speed forwarding rate

Alarm for power failure by relay output Redundant Terminal Block power inputs or DC Jack power input -20°C to 60°C operating temperature Hardened aluminum case Support DIN-Rail Mounting installation Support jumbo frame



# ORDERING INFORMATION

DGF-1500-08: Industrial 8-port 10/100/1000BASE-T Unmanaged Switch (DC Jack and Terminal Block)

### Installation Type:

DIN Rail (mounting kit is attached)

# Gigabit Operations:(Customization) (1)\*

2 Gigabit ports are available to customize for combo ports with other fiber interface as below..

### DGF-1500-08(X)

(X) = S: 1000BASE-SX(SC)

L: 1000BASE-LX (SC)-10Km

V: 1000BASE-LX (SC)-20Km

WR: 1000BASE-LX (SC) WDM-TX: 1310nm/RX:

1550nm-10Km

WT: 1000BASE-LX (SC) WDM-TX: 1550nm/RX:

1310nm-10Km

# Extenal Power Adapter (Option)

DOP-DC123A: AC-DC switching adapter

- + Input: 100-240V 0.8A/MAX 50/60Hz
- + Output:12V 3A
- + Operating Temperature: -40°C to 75°C(-40°F to 167°F)

# **SPECIFICATIONS**

#### **TECHNOLOGY**

#### Standards:

- + IEEE 802.3 10Base-T, 802.3u 100Base-TX, 802.3ab 1000Base-T 802.3z 1000Base-SX/LX (1)\*
- + IEEE802.3x Flow Control:Flow control for full-duplex
- + IEEE 802.1p Queue Priority: Support 4 priority queues

# Forward and Filtering Rate:

- + 14,880pps for 10Mbps
- + 148,810pps for 100Mbps
- + 1,488,100pps for 1000Mbps

### Packet Buffer Memory:

+ 144K Bytes

# Processing Type:

- + Store-and-Forward
- + Half-duplex back-pressure and IEEE802.3x full-duplex flow control

### Address Table Size:

+ 8192MAC addresses

### Jumbo Frame:

+ 9.6KB/Max.

# Latency:

- + 64 Bytes packet length less than 2.9 μs
- + 1518 Bytes packet length less than 7.9 μs

# POWER

# Input

- + Input Voltage: 9 to 32VDC (Terminal Block); 12VDC (DC Jack)
- + InputCurrent: 1.5A Max. (Terminal Block); 3A Max.(DC Jack)

# Power Consumption:

+ 7.2W Max. 0.3A@24VDC, 0.6A@12VDC

# **MECHANICAL**

# Casing:

+ Aluminum case

# Dimensions:

+ 58mm (W) x 110mm (D) x 135mm (H) (2.29" (W) x 4.33" (D) x 5.31" (H))

#### Weiah:

+ 0.8Kg (1.76lbs.)

#### Installation:

+ DIN-Rail Mounting

### **ENVIRONMENT**

### Operating Temperature:

+ -20°C to 60°C (-4°F to 140°F)

### Storage Temperature:

+ -40°C to 85°C (-40°F to 185°F)

### Ambient Relative Humidity:

+ 10% to 95% (non-condensing)

### INTERFACE

### **LED Indicators:**

- + Per Unit: Power Status (Power 1, Power 2, Power 3)
- + Per Port: Link/Activity (Green: 10/100Mbps, Orange: 1000Mbps)

# Alarm Contact:

+ Power failure by relay output

# REGULATORY APPROVALS

# ISO

+ Manufactured in an ISO 9001 facility

# Safety:

+ UL 508, EN 60950, IEC 60950, IEC 61000-6-2

# **Emission Compliance:**

+ FCC Part 15 Class A, VCCI Class A

# CE Approve:

- + EN55022(CISPR22 Class A)
- + EN55024(CISPR24 Class A)

# International Protection:

+ IP 30

# ESD Standards (IEC 61000-4-2):

- + Enclosure Contact: +/-4KV; Criteria B
- + Enclosure Air: +/-8KV; Criteria B

Radiated RFI Standards (IEC 61000-4-3):

DGF-1500-08

+ Enclosure Ports: 10V/m, 80 to 1000MHz; Criteria A

# Burst Standards (IEC 61000-4-4):

- + Enclosure Ports: +/-4KV@2.5KHz; Criteria B
- + D.C.Power Ports: +/-4KV; Criteria B

### Surge Standards (IEC 61000-4-5):

- + Signal Ports: +/-1KV;Line-to-earth; Criteria B
- + D.C.Power Ports: +/-0.5KV;Line-to-earth; Criteria B

# Induced RFI Standards (IEC 61000-4-6):

- + Signal Ports: 10V@0.15-80MHz; Criteria A
- + D.C.Power Ports: 10V@0.15-80MHz; Criteria A
- + Earth Ground Ports: 10V@0.15-80MHz; Criteria A

# *Magnetic Field Standards (IEC 61000-4-8):*

+ Enclosure Ports:30A/m@50,60Hz; Criteria A

### **Environmental Test Compliance:**

- + (IEC 60068-2-6)Vibration Resistance: 5G@150Hz; Criterion 3(Operation/ Storage/Transport)
- + (IEC 60068-2-27)Shock: 25G@11ms(Half-Sine Shock Pulse; Operation) 50G@11ms(Half-Sine Shock Pulse; Storage/Transport)
- + (IEC 60068-2-32)Free Fall:1M(3.281ft)



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