

# DFO38G12X-DFO48G12X/iX Fiber Optic Ethernet 10/100/1000Mbps Series



## DESCRIPTION

The DFO38G12X and DFO48G12X Series Ethernet TRX are designed to transmit/receive 10, 100 or 1000Mbps data over two (2) multimode or two (2) or one (1) singlemode fibers. Status indicating LED's are available for power, optical link and data traffic status. Plug-and-play design ensures ease of installation requiring no electrical or optical adjustments. Units are available in either 5VDC standalone, interchangeable with rack mount into a 19" x 2U Subrack with 16 slots and built-in, dual power supplies with input voltage 100-240VAC.



## FEATURES

- \* Provides up to 1000Mbps full duplex, half duplex transmission on 1 or 2 fibers
- \* Auto-negotiation and auto-sensing MDI-MDIX, no crossover cables required
- \* Ethernet 802.3 10Base T, 802.3u; 100Base-TX/FX Fast Ethernet, 802.3ab 1000Base-T, 802.3z 1000Base-SX/LX 802.3X Flow control 802.1q VLAN, 802.1p QoS, 802.1d spanning Tree
- \* Temperature rating of -10°~+55C°
- \* Power-on, Status and Data Traffic LEDs
- \* RJ-45 Ethernet Connector
- \* SC, LC Optical Connectors
- \* 550m MM Fiber and up to 120Km SM Fiber
- \* 5VDC standalone; 100-240VAC 19" 2U Chassis
- \* Compliance with CE, FCC, ROHS

## APPLICATIONS

- \* Homeland Security
- \* Correctional Centers
- \* Petrochemical Industry
- \* Corporate and Banking
- \* Casinos and Hospitality
- \* Health Care Centers
- \* Schools and Universities
- \* Government and Military
- \* Power Generating Plants
- \* Traffic Surveillance (ITS)

## ORDERING INFORMATION

### Standalone

DFO38G12XAYM0C	10/100/1000Mbps, Fiber Optic 2 fiber TRX (1310nm) MM, 5VDC SC
DFO38G12XEYM0C	10/100/1000Mbps, Fiber Optic 2 fiber TRX (20Km) SM, 5VDC SC
DFO48G12XFYM0C	10/100/1000Mbps, Fiber Optic 2 fiber TRX H/O (40Km) SM, 5VDC SC
DFO48G12iXDYM0C	1000Mbps, Fiber Optic 1 fiber TRX (1310/1550nm/20Km) SM, 5VDC SC
DFO48G12iXEYM0C	1000Mbps, Fiber Optic 1 fiber TRX (1550/1310nm/20Km) SM, 5VDC SC
DFO48G12iXFYM0C	1000Mbps, Fiber Optic 1 fiber TRX (1310/1550nm/40Km) SM, 5VDC SC
DFO48G12iXGYM0C	1000Mbps, Fiber Optic 1 fiber TRX (1550/1310nm/40Km) SM, 5VDC SC

### Rackmount

DFO38G12XAYRC	10/100/1000Mbps, Fiber Optic 2 fiber TRX (1310nm) MM, SC
DFO38G12XEYRC	10/100/1000Mbps, Fiber Optic 2 fiber TRX (20Km) MM, SC
DFO48G12XFYRC	10/100/1000Mbps, Fiber Optic 2 fiber TRX H/O (40Km) SM, SC
DFO48G12iXDYRC	10/100/1000Mbps, Fiber Optic 1 fiber TRX (1310/1550nm/20Km) SM, SC
DFO48G12iXEYRC	10/100/1000Mbps, Fiber Optic 1 fiber TRX (1550nm/1310/20Km) SM, SC
DFO48G12iXFYRC	10/100/1000Mbps, Fiber Optic 1 fiber TRX (1310/1550nm/40Km) SM, SC
DFO48G12iXGYRC	10/100/1000Mbps, Fiber Optic 1 fiber TRX (1550/1310nm/40Km) SM, SC



# DF038G12X-DF048G12X/iX

## Fiber Optic Ethernet

### 10/100/1000Mbps Series



#### Data Performance

Fiber ports: SC (MM, SM) and LC for 120Km  
 Electrical Port: RJ-45 w/auto-cross, 100BASE-TX and 10BASE-T  
 RJ-45 Ports Data Rate: 10/100 Mbps, FDX and HDX modes  
 Auto-negotiation and auto-sensing  
 MDI-MDIX - no crossover cables required; non-blocking switching  
 Bit Error Rate:  $<10^9$   
 Network Standards: Ethernet IEEE 802.3, IEEE 802.3u; IEEE 802.1p, 100BASE-TX, 10BASE-T, 100BASE-FX, 802.3ab 1000Base-T, 1000Base-SX/LX  
 VLANs Support: IEEE 802.1q received and transmitted unchanged

#### LED Indicators

#1: Power on  
 #2, # 3: RJ-45 TX/RX Status  
 #4, #5: Optical Link Status  
 #6: Data traffic, blinking for activity

#### Environmental Parameters

Operating Temperature: -10 °C~55°C  
 Storage Temperature: -40 °C~70°C  
 Operating Humidity: 5% - 95% (non-condensing)

#### Mechanical Parameters

Enclosure: Robust Steel sheet metal  
 Dimensions Standalone: 5.3"(135mm), 3.54"(90mm)  
 L x W x H 1.2"(30mm)  
 Dimensions Card: 5.3"(135mm), 3.4"(87mm)  
 L X W x H 1" (25mm)  
 DFO9200 Subrack 2U: 19"(485mm), 12.6"(320mm)  
 L x D x H 3.5"(90mm)H  
 Weight: 7.2oz (200g)

#### Power Supplies

Power Input: 5VDC  
 Power Connector: DC Power Jack  
 Power Consumption: > 2.5 Watts

#### MeanTime Between

**Failures (MTBF):** >50,000 hours

#### Regulatory Compliance:

**Manufactured to:** CE, FCC, ROHS  
 ISO9001:2000 Standards

#### Optical performance

Fiber type	Singlemode	Multimode
Wavelength	Laser 1310nm	Laser 1310nm
Output Power	-12 dBm/+2 dBm	-12dBm
Receiver Sensitivity	-23 dBm	-20dBm
Optical Loss Budget	10 dB/25 dB	8dB

