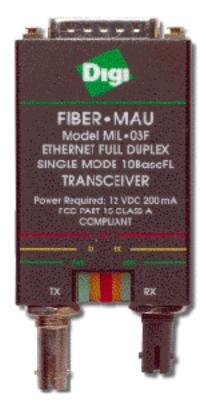
# DATA SHEET: Ethernet MicroTranscelvers

# Ethernet MicroTransceivers

# MIL-02F Fiber Optic Multi Mode 10BaseFL Transceiver MIL-03F Fiber Optic Single 10BaseFL Transceiver





 Detects faults without disrupting network traffic

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- Runs 50% cooler than most other fiber optic products
- Selectable half-and full-duplex Ethernet support
- Easier network diagnosis
- Efficient design allows for longer life
- Allows long fiber segments to be connected without optical attenuation
- Units can be tested and diagnosed in remote locations
- 5 year warranty



The Fiber • Mau MIL-02F is a micro Ethernet transceiver designed to allow LANs to communicate at distances of up to two kilometers in either half- or full-duplex modes.

Digi's Fiber • Mau MIL-03F single-mode fiber transceiver for Ethernet networks effectively converts AUI ports to single mode fiber optic cabling. The 03F will support single mode data transfers of up to 15 kilometers in full-duplex mode. It will support distances of up to 2 Km in half-duplex mode as per IEEE standard.

It provides the necessary interface to network workstations, PCs, and other Ethernet devices while eliminating bulky drop cabling. Front-edge LEDs provide easier diagnosis on rack-mounted hubs or similar equipment.

The unit also features Digi's LinkSentry™ remote sensing technology. LinkSentry enables fault-tolerant transceivers and hubs to detect faulty cables or bad equipment without disrupting network traffic. The Fiber•Mau-FDX also features the standard SQE test, which is externally switch-selectable.

Digi's 90% efficient power circuitry requires only 200 mA @ 12 VDC to power the entire unit. This allows the unit to run cool while still fitting in a compact package.

Can also connect more than 20 transceivers side by side on test equipment without causing heat or power issues.

## Features/Specifications

#### **Features**

- Converts full- or half-duplex AUI ports to fiber
- LinkSentry<sup>™</sup> remote-sensing
- Diagnostic LEDs located on the edge of the unit
- Operates at only 200 mA @ 12 VDC
- Automatically adjusts receive light levels
- Senses and disables link in low light conditions
- Provides loopback capability
- Supports data-transfers of up to 15 kilometers in full-duplex mode

#### Product Package

Installation Guide

#### **AUI Connector**

Type: 15-position D-Style male receptacle:

1: Chassis gnd 9: Control B
2: Control A 10: Data Out B
3: Data out A 11: Gnd
4: GND 12: Data in B
5: Data in A 13: Voltage+

6: Voltage rtn 14: Gnd 7: NC 15: NC

8: NC

GND = Ground

NC = No Connection

#### 10BaseFL

IEEE 802.3 compliant and FOIRL

#### ST Style Connectors Fiber Characteristics

Unit	02F	03F
Attenuation		
dB/Km	3.7	.5
Diameter		
um	62.5	8-9
Tx-Rx Wave	length	
nm	800	300
Tx Launch I	Power	
dB/m	-19	-19
RX-Sensitivi	ty	
dB/m	-34	-36
Dynamic Ra	nge	
dB/m	15	16

#### Maximum Distance

#### 02F

Full-duplexHalf-duplex2 Km

Full-duplexHalf-duplex2 Km

#### **Budget Example**

To ensure a functional fiber link, the total attenuation loss in the link must be equal to or less than the dynamic range value. The typical loss through interconnects is 1dB. The equation is; Dynamic Range - (Attenuation \* Cable length) - (Number of Interconnects \* Loss per Interconnect) 0 For example, if the total cable length is 2 Km and three interconnects. 15 - (2 \* 3.7) - (3 \* 1) = 4.6 0 dB/m Voltage

#### LED's

Provides a complete set of diagnostic LEDs to analyze your network activity at a glance. LEDs light to indicate:

- PWR: Receives power from wall adapter
- RX: Receiving data packets on the fiber port
- CX: Collision detected on fiber port
- TX: Transmitting data packets out the fiber port

1.6 in. (4.1 cm)

#### Electrical

VoltageAmperagePower RatingFrom AUI

#### Standards Compliance

UL, CSA, TUV, CISPR-B, FCC A, CE marked

#### Environmental

- Operating Temperature0 50 C
- Storage Temperature-20 - +70 C
- Humidity (non condensing)10% 90%

#### Digi Service and Support

You can purchase with confidence knowing that Digi is here to support you with expert technical support, the industry's strongest warranty (five full years) and a 30 day money-back guarantee.

### Digi International Corporate:

11001 Bren Road East Minnetonka, MN 55343

> Tel: 1-800-344-4273 612-912-3444 FAX: (612) 912-4952 E-Mail: info@dgii.com Web: www.dgii.com

Regional Sales offices
Minnesota: 1-800-344-4273
California: 1-800-466-4526
Ohio: 1-800-782-7428
Tennessee: 1-800-366-8844

#### **International Sales offices:**

Virginia: (703) 553-2560

Denmark: +45 49 17 70 90 France: +33 1 46 40 39 20 Germany: +49 221 920 520

The

Netherlands: +31 20 5207 566

United

Kingdom: +44 1276 853 600 Australia: +61 2 96 80 8944 Hong Kong: +852 2833 1008 Singapore: +65 732 1318 Email: europeinfo@dgii.com

> latinamericaninfo@dgii.com pacificriminfo@dgii.com

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their respective holders. GSA: GS-35F-3395D.

Dimensions
Height Width Depth Weight

(1.6 cm)

#### **Physical**

2.45 in. (6.22cm)

The MIL 02F/03F are pakcaged in lightweight aluminum alloy with a black finish for years of durable, maintenance-free use.

#### Models and Part Numbers

LINK: Fiber link is intact



Unit 3.5 oz. (.09 Kg) Shipping 5.0 oz. (.14 Kg)