

About the TFOCA-II® Fiber Optic Modem

Amphenol Fiber Systems International (AFSI) offers the TFOCA-II® Fiber Optic Modem (FOM) to provide optical-electrical (O-E) and electrical-optical (E-O) conversion for harsh environments. This stand-alone unit features ruggedized optical transceivers integrated in a compact housing with 10/100/1000 Ethernet electrical interfaces (additional electrical interfaces available-consult factory) and AFSI's TFOCA-II® connector.

The "plug and play" unit allows systems engineers to effortlessly convert their systems to take advantage of the benefits of fiber optics without the need to design and develop harsh environment fiber optic transceivers and associated electronics. Also, the TFOCA-II® FOM's compact size significantly reduces the footprint devoted to O-E and E-O conversion using discrete components. The standard TFOCA-II® FOM supports conversion for 10/100/1000 (auto adaptable) Ethernet providing up to 1.0Gb/s transport over 10 miles using single mode fiber.

The unit incorporates AFSI's TFOCA-II® field-proven connector (US Army standard fiber optic connector) with hundreds of thousands of units deployed. The rugged four channel TFOCA-II® is hermaphroditic, allowing the user to easily concatenate cable assemblies in the field to meet the required length.

Applications

- Military Command Shelters and Platforms
- Communication Systems
- Satellite Communications
- Fiber Optic Infrastructures
- Ruggedized LAN Systems
- Vehicles
- Radar



TFOCA-II® FOM

Features & Benefits

- Effortlessly converts systems to fiber optics (longer distances, EMI/RFI immunity, lighter weight) without major system design/redesign
- Compact size significantly reduces O-E/E-O conversion compared to traditional discrete designs
- Harsh environment transceivers support extended temperature range and military vibration/shock requirements
- Supports single mode or multimode operation
- Supports single or dual auto-adaptable 10/100/1000 Ethernet O-E/E-O conversion
- Compliant with IEEE 802.3
- Field-proven TFOCA-II® connector

Specifications

Optical Specifications:

Optical Connector: TFOCA-II®

Channels: 2 (1 discrete pair of optical TX/RX) or 4 (2 discrete pairs of optical TX/RX)

Wavelength: 1310nm

Fiber Type: Singlemode (9/12microns) or Multimode (50/125 or 62.5/125)

Transmission distance (maximum): Multimode 500 meters; Single mode 10 kilometers

Optical transmission rate: 1.0Gbps

Optical budget Multimode (typical): TX -7.0dB, RX -17dB

Optical budget Singlemode (typical): TX 0dB, RX -30dB

Electrical Specifications:

Electrical Connector: Dual RJ-45 connectors or Customer defined

Interface: Dual discrete 10/100/1000Mbps Ethernet channels

Conformance: IEEE 802.3

Power: USB-B receptacle

(+5VDC @ 450mA/channel) or Customer defined

Environmental Specifications:

Operating Temperature: +60°C to -20°C

Storage Temperature: +85°C to -40°C

Vibration: MIL 810 Transport



How to Order

To order or to obtain a price quote on our AFSI TFOCA-II® FOM product line, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or e-mail sales@fibersystems.com.



About Amphenol Fiber Systems International

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than a decade, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II® connector, which AFSI developed and patented.

AFSI has delivered millions of fiber optic connectors in more than 34 countries. Whenever there is a need for superior, cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

Visit www.fibersystems.com for more information.



TFOCA-II® FOM

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