Amphenol FSI

ARCH® Media Converter



About the TFOCA-II[®] Media Converter:

Amphenol Fiber Systems International (AFSI) offers the ARCH® Media Converter 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 – consults factory) and AFSI's famous and field proven connectors.

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

The unit incorporates AFSI's TFOCA-II®, Expanded Beam, etc. field-proven connectors (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.

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
- 1 or 2 port Ethernet options
- Supports single or auto-adaptable 10/100 or 100/1000 Ethernet O-E/E-O conversion
- Compliant with IEEE 802.3
- Multiple Field-proven connector options
- Communication Systems

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Applications:

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

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: 850, 1300, 1310, 1550nm
- <u>Fiber Type:</u> Single-mode (9/125mm) or Multimode (50/125 or 62.5/125mm)
- Optical transmission rate: up to 1.0Gbps

Optical Characteristics:

- 10/100:Optical Output Power: -20dBm to -14dBm
- 10/100:Receiver Input Sensitivity: -32dBm to -8dBm
- 100/1000:Optical Output Power: -9.5dBm to -3dBm
- 100/1000:Receiver Input Sensitivity: -19dBm to -3dBm

Electrical Specifications:

- <u>Electrical Connectors</u>: Dual RJ-45, RJ Field, D3899 connectors or Customer defined
- Interface: Dual 10/100 or 100/1000Mbps Ethernet ports
- Conformance: IEEE 802.3
- Power: USB-A receptacle (+5VDC @ 450mA), POE, Type
 Mode A (48VDC @ 50mA) or Customer defined

Environmental Specifications:

- Operating Temperature: -40°C to 71°C
- Storage: -56°C to 85°C
- Vibration: Mil 810 Transport





How to Order:

For more information on how to to order or to obtain a price quote on our ARCH® Media Converter product line, call toll free (U.S. only) at 800.472.4225, international calls please use 1.214.547.2400 or email info@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 two decades in business, 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.