

# Ethernet Media Converter Series

MIL-83526, Expanded beam, Fiber Optic Connector, Hermaphroditic, Ethernet Media Converter  
Defense, Avionics, Mining, Offshore, Broadcast, Rugged field deployable applications



## ETM100M MEDIA CONVERTER

- Advanced expanded beam technology
- Rugged field deployable fiber optic connector
- FP Lasers & PIN PD for 100BASE-FX
- Single or Multi-mode Fiber
- Electrical Interface compliant with IEEE 802.3 (10/100 BASE-T)
- Wide Input Voltage Range : 18 – 36V
- Very high resistance to vibration, shock, environmental effects, dust, and debris

### Description

The X-BEAM Tech ETM100M Media Converter, featuring expanded beam technology, rugged construction for field deployment have been designed for harsh environment applications such as military tactical communications, avionics systems, outside broadcast, mining and plant.

The expanded beam technology uses expanded and collimated beams to couple optical fibers without any contact. It could allow for optics to be used in areas that have been quite restrictive due to presence of damage or contamination at the fiber end. Hermaphroditic connector design enables fast deployment by daisy-chaining multiple cable segments.

### Key features

- Ethernet ports
  - \_ 10/100 Base TX to 100 Base FX Media converter
- Fiber ports
  - \_ MIL-83526 Expanded beam Connector
- Connectors
  - \_ MIL-D-38999 (Power & Ethernet)
- Networking
  - \_ LED indication(TP/FP Link, Power)
- Chassis
  - \_ Aluminum



# ETM100M MEDIA CONVERTER

## Specifications

Characteristics		
Optical Wavelength	Typ. 1310nm (1280 ~ 1345)	
100Mbps-Tx	IEEE 802.3u, 100Base-TX	TIA/EIA-568-B Cat5E ,
100Mbps-Fx	IEEE 802.3u, 100Base-FX	
Operating Conditions		
Operating Temperature	-35 °C to 75 °C	
Supply Voltage	18 ~ 36V	Typ. 24V
Supply Current	Typ. 85 mA @24VDC	
Absolute Max. Conditions		
Storage Temperature	-45 °C to 85 °C	
Supply Voltage	18 ~ 36V	
Indication LED		
LED	1.Power	4. 100Mbps
	2.FP LINK	5. TP LINK
	3.SD	6. FDX

## Connectors Specifications

Part	Characteristics	Condition
Fiber Connector	MIL-83526 Expanded beam Connector	
Power Connector	MIL-D-38999	
Ethernet CONNECTOR	MIL-D-38999	

## Compliance Specifications

Characteristics	Standard	Condition
Mechanical Shock	MIL-STD-810	40g, 15ms pulses
Mechanical Vibration	MIL-STD-810	30grm
ESD	IEC-61000-4-2	
Humidity	IP67	

## Mechanical Specifications

Dim. & Finish	
Dimensions	108.5 x 82 x 65 ( L x W x H ), unit: mm
Weight	0.8kg Typ.
Finish	Electroless nickel plating