

## Hardened Mini Fast Ethernet Media Converter

10/100Base-TX to 100Base-FX



The M/E-ISW Series is a hardened Fast Ethernet Mini media converter that provides a cost effective, plug-and-play media conversion between 10/100Base-TX ports and 100Base-FX ports for hardened or outdoor 10/100 environments. With its supported operating temperature range of -40°C to 75°C, the Mini offers a space saving alternative for converting copper to fiber in extreme environments.

### Features

- Unit and Port LEDs provide quick status
- Auto-Negotiation
- Fixed Full-Duplex on fiber
- Auto-MDI/MDIX
- Link Pass Through
- Active Link Pass Through on SFP version
- Automatic Link Restoration
- Far-End-Fault (FEF)
- DC and AC power inputs via terminal block
  - If the voltage of your power source doesn't match the device input power, external power supplies are available
- Includes barrel connector pig-tail cable
- Overload Current Protection
- Reverse Polarity Protection
- Easily integrate fiber into industrial, hardened, or outdoor locations to reach devices at the edge of the network
- Small mechanical size allows use in enclosures with space constraints
- No configuration required
- Available with LC, ST or SC fiber interfaces and available for multimode or single mode fiber
- Multiple mounting options:
  - DIN Rail clip and velcro included
  - Wall mount bracket sold separately

### Specifications

Standards	IEEE 802.3
Max Frame Size	2,046 bytes (for all except SFP version) 10,240 bytes (for SFP version)
Status LEDs	PWR (Power): (below RJ-45) FX-Link/Act (Fiber Link/Activity): (Upper Left on RJ-45) ON = Link; Flashing = Activity TX-Link/Act (Copper Link/Activity): (Upper Right on RJ-45) ON = Link; Flashing = Activity
Dimensions	Width: 1.8" [46 mm] Depth: 3.3" [85 mm] Height: 0.85" [22 mm]
Power Consumption	2.5 Watts
Power Input	2-pin Terminal Block Unit accepts 12-48 VDC and 24-36 VAC ± 10% Overload Current Protection Reverse Polarity Protection
Ingress Protection	IP20
Environment	Operating: -40°C to 75°C Storage: -40°C to 85°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	2 lbs. [0.90 kg]
MTBF	41,680 hours (MIL-HDBK-217F) 114,580 hours (Bellcore7 V5.0)
Certifications	FCC Class A, CISPR22/EN55022 Class A, EN55024, CE Mark
Warranty	Lifetime

### Ordering Info

#### M/E-ISW-FX-02(SFP)

10/100Base-TX (RJ-45) [100 m/328 ft.]  
to 100Base-FX Open SFP Slot

#### M/E-ISW-FX-02

10/100Base-TX (RJ-45) [100 m/328 ft.]  
to 100Base-FX 1300nm multimode (ST)  
[2 km/1.2 mi.] Link Budget: 14.0 dB

#### M/E-ISW-FX-02(SC)

10/100Base-TX (RJ-45) [100 m/328 ft.]  
to 100Base-FX 1300nm multimode (SC)  
[2 km/1.2 mi.] Link Budget: 14.0 dB

#### M/E-ISW-FX-02(MMLC)

10/100Base-TX (RJ-45) [100 m/328 ft.]  
to 100Base-FX 1300nm multimode (LC)  
[2 km/1.2 mi.] Link Budget: 11.0 dB

#### M/E-ISW-FX-02(SM)

10/100Base-TX (RJ-45) [100 m/328 ft.]  
to 100Base-FX 1310nm single mode (SC)  
[20 km/12.4 mi.] Link Budget: 19.0 dB

#### Optional Accessories (sold separately)

##### SFP Modules

Supports Hardened Grade SFP Modules

#### AC Power Supplies (sold separately)

##### SPS-UA12DHT

100-240 VAC input  
(0°C to +70°C Operating temperature)

##### 25165

Universal AC/DC Input DIN Rail Mountable  
+12 VDC Power Supply

#### Mounting Options (sold separately)

##### WMBM

Wall Mount Bracket for Mini Converters