

EMP1



*FAST ETHERNET MEDIA CONVERTER
10/100TX TO 100FX PoE+*

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EMP1

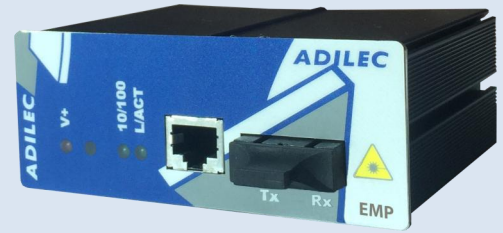


FAST ETHERNET MEDIA CONVERTER

10/100TX to 100FX Version PoE+ 12-24Vdc

1 and 2 Optical fibers

(-40° to 74°C) Industrial Range



- **Media converter from Ethernet 10/100BaseTX to 100BaseFX**
- **Automatic communication detection (Full duplex or Half duplex)**
- **Bidirectional transmission over 1 or 2 optical fibers**
- **Available versions for multimode or singlemode**
- **Power over Ethernet (PoE+) up 15.5W (12Vdc) and 30W (24Vdc)**
- **Industrial Temperature Range**
- **Mechanical format: Standalone/DIN rail**

EMP1 Media Converter series allow connection and conversion point to point Ethernet or Fast Ethernet over fiber optic. Reaching distances of 6,5 or 50 Kms depending on model. See table below. Incorporated PoE+ injector up 30W with power supply at 24Vdc according standard IEEE802.3at.

EMP1 is completely transparent to communications. Incorporated Link Fault Through detecting when a fault occurs in Ethernet or fiber communication, acting on interrupt network communication (see note 3).

Frontal LED's for quick verification and installation.

Model	Compatible Models	Wavelength	Connector	Fiber	Max. Power Loss ¹
EMP112N16	EMP112N16 EMC112N16 EMD112N16	1310nm 2 x MM	SC	2x62.5/125 2x50/125	11dB (50/125: 6.5 km) ² (62.5/125: 5 km) ²
EMP115N16	EMP116N16 EMC116N16 EMD116N16	1310/1550nm 1 x MM	SC	2x62.5/125 2x50/125	11dB (50/125: 6.5 km) ² (62.5/125: 5 km) ²
EMP112M16	EMP112M16 EMC112M16 EMD112M16	1310nm 2 x SM	SC	2x9/125	19dB (9/125: 50 km)
EMP115M16	EMP116M16 EMC116M16 EMD116M16	1310/1550nm 1x SM	SC	2x9/125	19dB (9/125: 50 km)

(1) Attenuations: 3dB/Km at 850nm and 1dB Km at 1310nm over fiber cable 62.5/125. Over 9/125, 0.4dB/km at 1310nm.

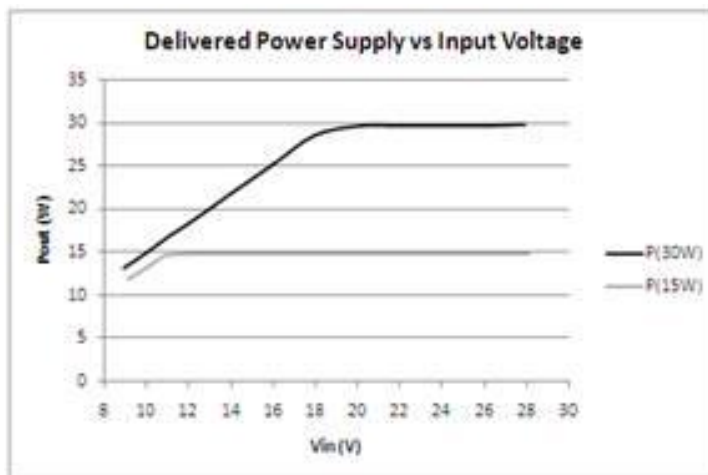
(2) Maximum distance approximated by limited bandwidth (in correct conditions)

(3) **Models EMP115x16 y EMP116x16 not available Link Fault Pass-Through function.**

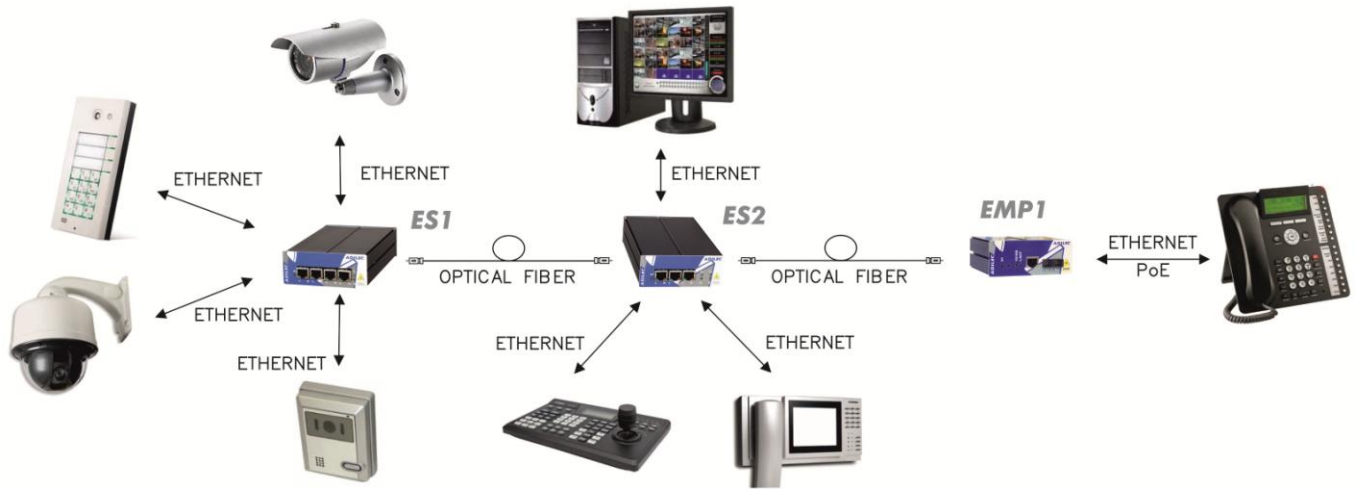
Technical specifications:

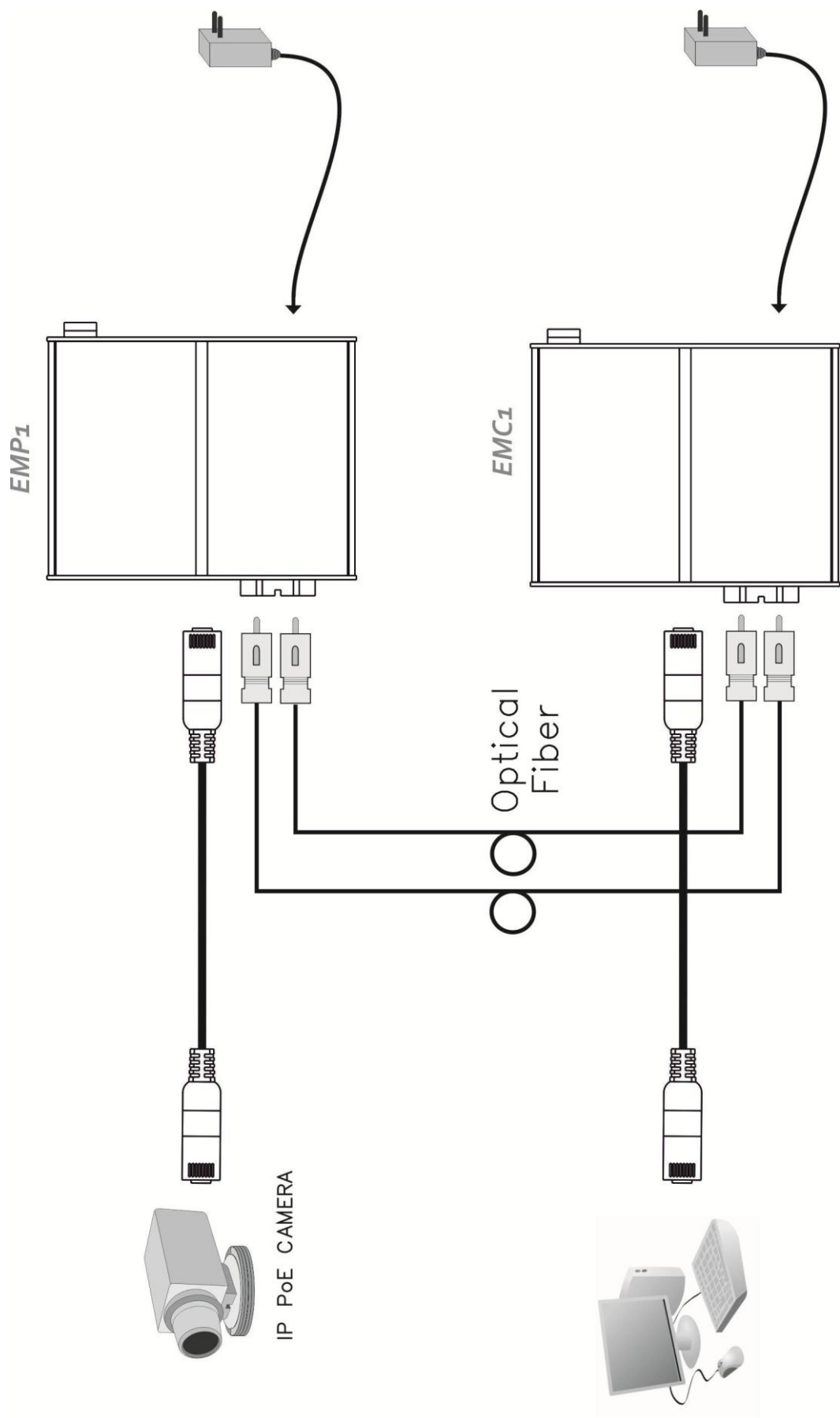
Communications	
Signal Type	10/100BaseTx
Fiber speed	100Mbps
Operation mode	Full duplex or Half duplex
Media Converter Power Supply	
Max. Consumption	1.55A/12Vdc - 1.5A/24Vdc
Power supply	12~24Vdc \pm 15%
Max. Output Power	15.4W/30W*
Optic characteristics	
Multimode optical power	-19dBm
Multimode receiver sensitivity	-30dBm
Singlemode optical power	-15dBm
Singlemode receiver sensitivity	-34dBm
General	
MTBF	100.000hours
Dimensions EMP1XXX16 (standalone/DIN Rail)	41×106×84 mm
Weight	255 gr
Operating temperature range	-40 to 74 °C
Storage temperature range	-55 to 85 °C
Relative humidity	95% without condensation

* Delivered power supply depends on the input voltage. With 12V input voltage the output power is 15.5W maximum (IEEE802.3at type 1 classification). With 24V we can deliver up to 30W (IEEE802.3at type 2 classification). See attached picture with the relationship between voltage input and output power



Application:



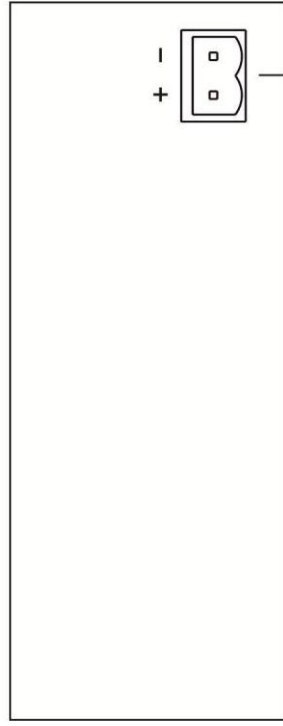


CONNECTION EXAMPLE
EMC1 / EMP1

Equipments with this scheme:
 EMC1XXXXX, EMP1XXXXXX

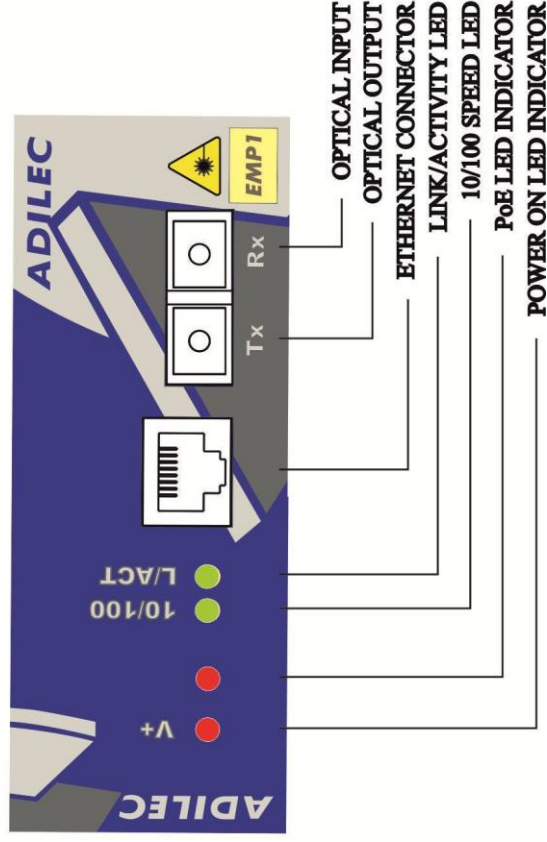
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Rear View



**POWER SUPPLY
CONNECTOR**

Front View





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