

IB2050
HEMERA

PoE media converter (PSE)

BENEFITS

- Transmission over 1 multi-mode or single-mode optical fiber by the same module
- Transmission over 2 multi-mode or single-mode optical fiber by the same module
- RJ45 connection by a straight-through or crossover cable (auto-negotiation)
- Baud rate 10/100 Mbit/s auto-negotiated
- Supports Half and Full-duplex modes
- Can be integrated at the foot of the mast
- PoE+ IEEE 802.3at PoE+ power supply (≤ 35W)
- Supply voltage 54VDC for the module and the PoE function
- DIN rail mounting (optional)
- Place of production and after-sales service: France
- Product warranty: 3 years

APPLICATIONS

This media converter module is used to convert 10/100Base-T Ethernet to 100Base-BX for transmission on 1 optical fiber and to 100Base-FX on 2 optical fibers, while also able to power the unit connected by the cable.

In compliance with the PoE+ (Power over Ethernet) IEEE 802.3at standard, it features the PSE (Power Sourcing Equipment) function and can supply up to 35W power to PD (Powered Device) peripheral devices via the Ethernet cable.

This product is perfectly suited to the following applications:

- Remote control of IP cameras or IP video encoders
- Lan
- MAN
- Industrial network
- Ethernet network extension, etc.

The operating indicators ensure safe usage.

It is available in an individual box and can be integrated at the base of a camera mast as part of, for example, a video surveillance application with transmission over an IP network.

A DIN rail mounting kit can be provided on request.

Function

- Ethernet Media Converter 10/100Base-T to Fiber 100Base-FX (2-fiber) or 100Base-BX (1-fiber)
- Complies with 802.3 standards

GENERAL CHARACTERISTICS

GENERAL

LAN interface features	
Number of RJ45 access points	1
Protocols	10/100 Base-TX (auto-negotiation)
Operating mode	Half-duplex / Full-duplex
Connection	4-pair cable CAT. 3 or 5 UTP straight or crossover (Auto-MDI)

Fiber characteristics				
Optical fiber (µm)	Multimode (50/125 or 62.5/125)		Single-mode 9/125* OS2	
Number of fibers and series	2 OF	1 OF	2 OF	1 OF
Optical power budget	0 to 11dB		0 to 20dB	0 to 19dB
Wavelength (TX)	1310 nm	1310 nm	1310 nm	1310 nm
Distance*	0 to 10km		0 to 30km	0 to 10km
Connectors	SC/PC duplex	SC/PC	SC/PC duplex	SC/PC

* Distances are given for information only and vary according to the type of fiber and network and may be limited by the fiber bandwidth.

Indicators		
Indicators	Type	Function
Laser on	Green Led	Indicates laser emission and power
PD Connection	Green Led	PoE PD device recognized on the RJ45 port
RJ45 Connection	Green Led	Ethernet device connected to the port
RJ45 Activity	Green Led	Ethernet signal reception on the RJ port
Fiber connection	Green Led	Fiber connection
Fiber port activity	Green Led	Ethernet signal reception on the fiber port

Housing (L x W x H) : 67 x 62 x 23 mm	
Mounting	By screw or on DIN rail
Mounting plate 85 x 23 mm	4 x Ø oblong 3.2 mm on a rectangle of 68 to 79 mm x 14 mm
Supply voltage	54 VDC nominal (50 to 57V)
Power consumption	2 W max + power supplied to the connected PD equipment (35 W max)

ENVIRONMENTAL

Environment	
Operating temperature	-20 to +60°C
Storage temperature	-40 to +85°C
Relative humidity	0-85 % (not condensed)
Tropicalization option	0 to 95%

RANGE

Wavelength (λ)	Reference	Applications	Connectors
Transmission of up to 10 km over multimode fiber and up to 30 km over single-mode fiber			
Transmission over 2 fibers at 1310 nm	IB2050	Media converter 10/100 Base-TX to 100 Base-FX Fiber on 2 multimode or single-mode fibers	SC/PC
Transmission over 1 fiber at Tx 1310 nm / Rx 1550 nm	IB2050	Media converter 10/100 Base-TX to 100Base-BX Fiber on 1 multimode or single-mode fiber	SC/PC