



User Manual

Code: ETH10-2WIRE-SET

SET OF UTP / 2-WIRE CONVERTERS FOR LAN+POE TRANSMISSION **ETH10-2WIRE-SET** 2 PCS
SET ATTE

Warning!

Please read the user manual included in this work as it contains important information related with safety of installation and use of the device.

Only persons who read the user manual may use the device.

The user manual must be kept because it may be required in the future. The device is to be used exclusively for purposes specified in this user manual.

The device must be unpacked prior to starting-up. After removing the packaging make sure the device is in working order. If the product has defects, it should not be used until it is repaired.

The product is intended for use at home and commercial use and may not be used for other than intended use.

The manufacturer is not liable for damages resulting from not adhering to the rules contained in the user manual, therefore, we recommend to follow the aforementioned safety rules for operation and maintenance of the device. In this way you will ensure yourself safety and avoid causing damage to the device.

The manufacturer and the supplier are not liable for losses or damages arising out of the product, including financial or intangible losses, loss of profits, income, data, pleasure from use of the product or other products related with it - indirect, incidental or consequential loss or damage. The above provisions apply whether the loss or damage concerns:

1. Deterioration of quality or the lack of operation of the products or products related with it due to damage as well as the lack of access to the product when it is undergoing repair, which results in stoppage the loss of user's time or a break in business activity;
2. Improper results of operation of the product or products related with it;
3. It applies to losses and damages according to any legal category, including negligence and other losses, termination of a contract, expressed or implied guarantee and strict liability (even if the manufacturer or the supplier was notified about the possibility of occurrence of such damages).

Safety measures:

Particular attention at designing was directed to quality standards of the device where ensuring safety of operation is the most important factor.

The device must be secured against contact with caustic, staining and viscous fluids.

The device was designed in such a way that it restarts operation when power supply is restored after a break.

Attention! We recommend using protections to further protect the device from possible overvoltages in installations. Surge protectors are effective protection against accidental pass to the device voltages higher than the rated. Damages caused by pass the voltages higher than specified in manual, are not under warranty.

Turn off the device before transporting it.

Prior to connecting the device to a power source check whether the supplied voltage is consistent with rated voltage specified in the user manual.

Proper product disposal:

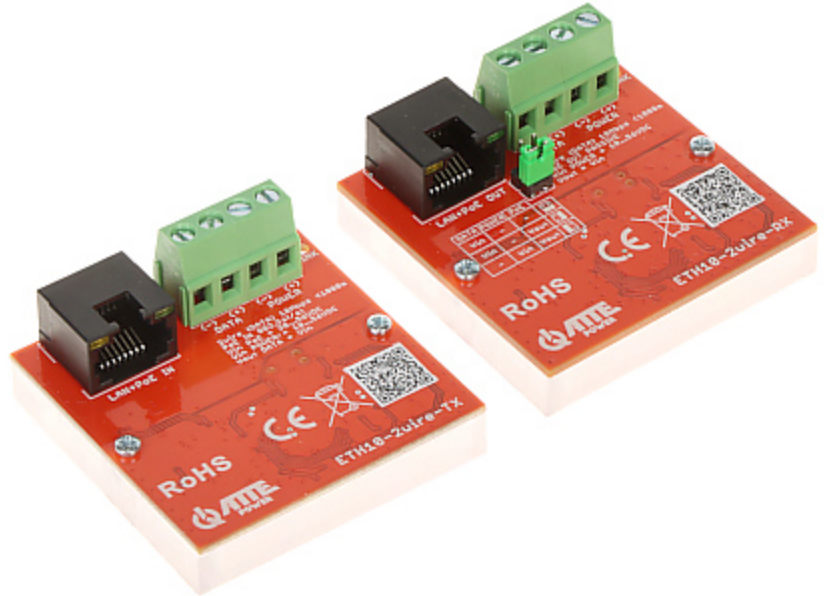
A marking of a crossed out waste bin indicates that the product may not be disposed together with other household waste in the entire EU. To avoid possible damage to the natural environment of health due to uncontrolled waste disposal, therefore, it should be handed over for recycling, propagating in this way sustainable use of natural resources.

To return a worn-out product, use a collection and disposal system of this type of equipment or contact a seller from whom it was purchased. He will then be recycled in an environmentally-friendly way.

The ETH10-2WIRE-SET set includes transmitter and receiver modules, it is used for Ethernet data and PoE power supply transmission using 2 wires, e.g. one pair of UTP twisted pair cable.

The devices allow the installation of cameras or other IP PoE devices in places where replacement of the existing cabling is impossible or unprofitable. The ETH10-2wire-TX module is powered from any PoE switch (RJ45 port) and then via 2 wires, it enables two-way network communication and powering the ETH10-2wire-RX module. The camera or another PoE receiver can be connected to the RJ45 port of the ETH10-2wire-RX module at the end of the line. The devices can be optionally powered from the POWER screw terminals.

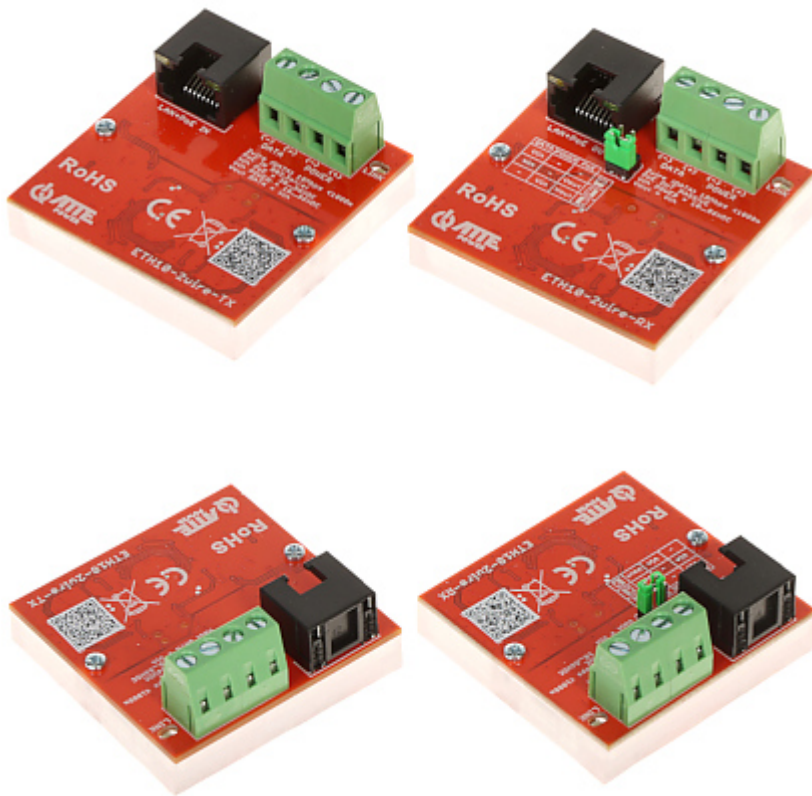
Depending on the selected converter operation mode, powering them and devices connected to them can be realized in several ways. PoE power supply or from an external power supply, both from the ETH10-2wire-TX transmitter and the ETH10-2wire-RX receiver (configuration with jumpers).



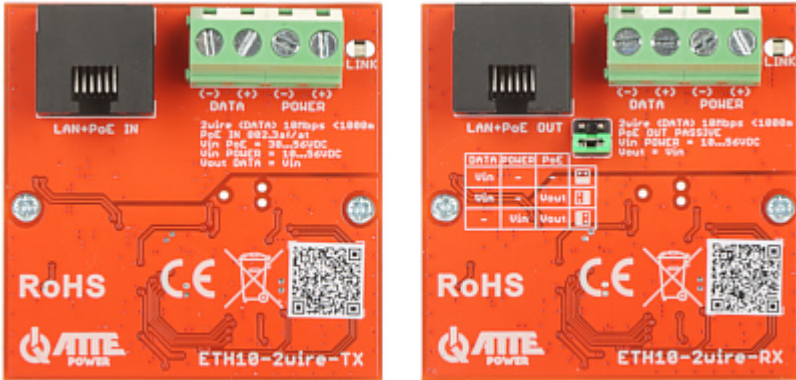
Connectors:	<ul style="list-style-type: none"> • 1 pcs RJ45 • 1 pcs terminals (screw terminals) - 0.32 ... 3.3 mm² (22 ... 12 AWG)
LAN ports:	1 pcs RJ45 10 Mbps
Connectors description:	<p>ETH10-2WIRE-TX :</p> <ul style="list-style-type: none"> • PoE IN - Passive PoE ≤ 30 W, PoE (802.3at) ≤ 30 W, PoE (802.3af) ≤ 15 W ("+" : 1, 2 pins; "+/-" : 3, 6 pins) or ("+" : 4, 5 pins; "+/-" : 7, 8 pins) • Power • DATA - 2-wire <p>ETH10-2WIRE-RX :</p> <ul style="list-style-type: none"> • PoE OUT - Passive PoE ("+" : 4, 5 pins; "-" : 7, 8 pins) • Power • DATA - 2-wire
Transmission speed:	10 Mbps
Transmission range:	<ul style="list-style-type: none"> • 1000 m @ 2-wire • 100 m @ UTP : Switch PoE - ETH10-2WIRE-TX • 100 m @ UTP : ETH10-2WIRE-RX - IP Camera
LED indicators:	<ul style="list-style-type: none"> • Power • LAN • 2-wire
Protections:	<ul style="list-style-type: none"> • Overvoltage - LAN, DATA • Protection against reverse polarity connection - Power • Overload 0.6 A - PoE IN ETH10-2WIRE-TX
Main features:	<ul style="list-style-type: none"> • Plug & Play • Support for IP cameras and network devices • Full transparency for networks • Operation modes - Set with jumpers



Power supply:	ETH10-2WIRE-TX : • 30 ... 56 V DC - PoE • 10 ... 56 V DC - Power ETH10-2WIRE-RX : • 10 ... 56 V - Power • The output PoE voltage is equal to the input voltage
Power consumption:	1.35 W (total)
Housing:	Plastic (PC)
"Index of Protection":	IP20
Operation temp:	-25 °C ... 65 °C
Weight:	0.03 kg (single element)
Dimensions:	51 x 51 x 24 mm (single element)
Manufacturer / Brand:	ATTE
Guarantee:	3 years

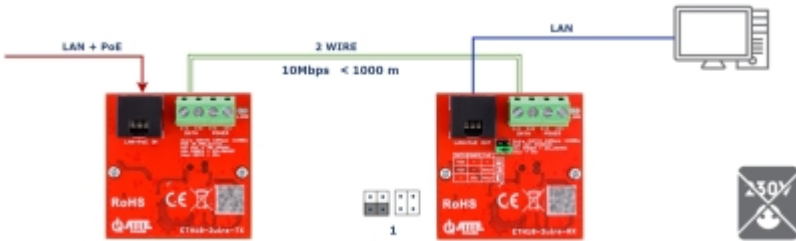


Top view:



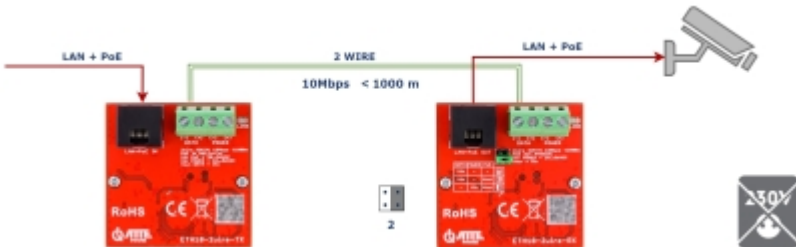
Examples of connection diagrams:

1 mode:



Receiver without PoE power supply

2 mode:

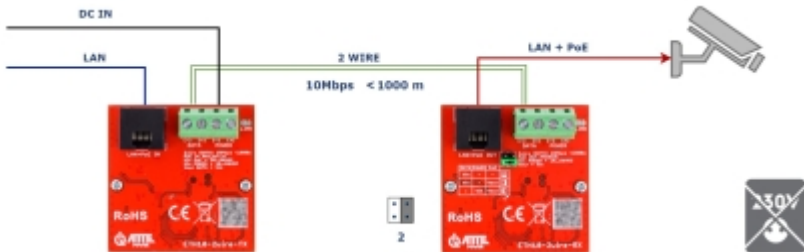


The camera is powered from PoE via the 2-WIRE line.

In such a configuration, attention should be paid to voltage drops in the 2-WIRE line.

The PoE budget delivered to the camera depends on the diameter of the wires and the length of the cable used.

2 mode:



Powered by the power adapter.

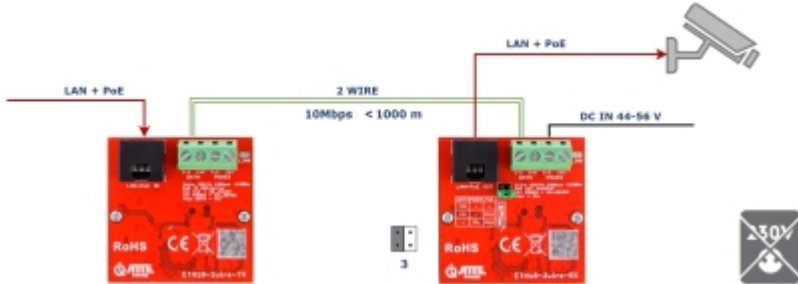
The camera is powered from PoE via the 2-WIRE line.

In such a configuration, attention should be paid to voltage drops in the 2-WIRE line.

The PoE budget delivered to the camera depends on the diameter of the wires and the length of the cable used.

The ETH10-2WIRE transmitter and receiver will work properly in the 10-56V voltage range, but the camera connected to the receiver usually requires PoE power supply at 44-56V.

These factors should be taken into account when selecting the power supply voltage of the ETH10-2WIRE-TX transmitter.
3 mode:



Local power supply at the camera.

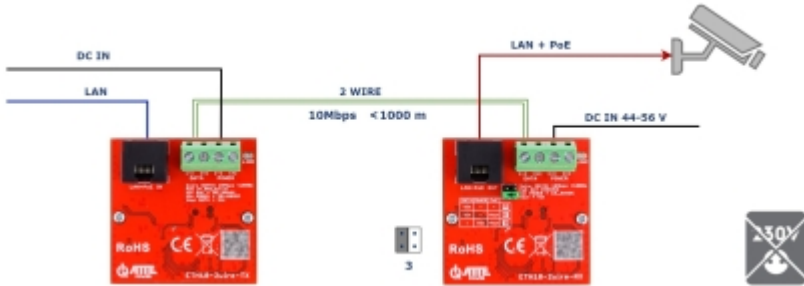
The camera is powered by PoE directly from the ETH10-2WIRE-RX receiver.

The ETH10-2WIRE-RX receiver will work correctly in the DC IN 10-56V voltage range, however the camera connected to the receiver usually requires PoE power supply at 44-56V.

These factors should be taken into account when selecting the power supply voltage of the ETH10-2WIRE-RX receiver.

The ETH10-2WIRE-TX transmitter can, in this configuration, work with any PoE standard.

3 mode:



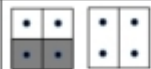
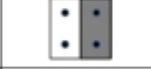
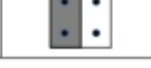
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The ETH10-2WIRE-RX receiver will work correctly in the DC IN 10-56V voltage range, however the camera connected to the receiver usually requires PoE power supply at 44-56V.

These factors should be taken into account when selecting the power supply voltage of the ETH10-2WIRE-RX receiver.

The ETH10-2WIRE-TX transmitter in this configuration can work with the DC IN 10-56V power supplied to the POWER connector.

Possible settings:

		DATA	POWER	PoE
1		Vin	-	-
2		Vin	-	Vout
3		-	Vin	Vout

1 - 1 mode

2 - 2 mode

3 - 3 mode

PACKAGE





User Manual

Code: ETH10-2WIRE-SET

SET OF UTP / 2-WIRE CONVERTERS FOR LAN+POE TRANSMISSION **ETH10-2WIRE-SET** 2 PCS
SET ATTE

Dimensions (L x W x H): 0x0x0 mm	Gross Weight: 0 kg
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