

ETH-ETH500-SET

LAN+PoE network range extender

range up to 500m 100Mbps, up to 800m 10Mbps

INSTRUCTION MANUAL

ETH-ETH500-SET is a set of converters extending the range of a LAN network with POE. Installed between any PoE switch and a PoE-powered IP camera, it allows you to increase the network range up to 800m using a standard UTP cable.

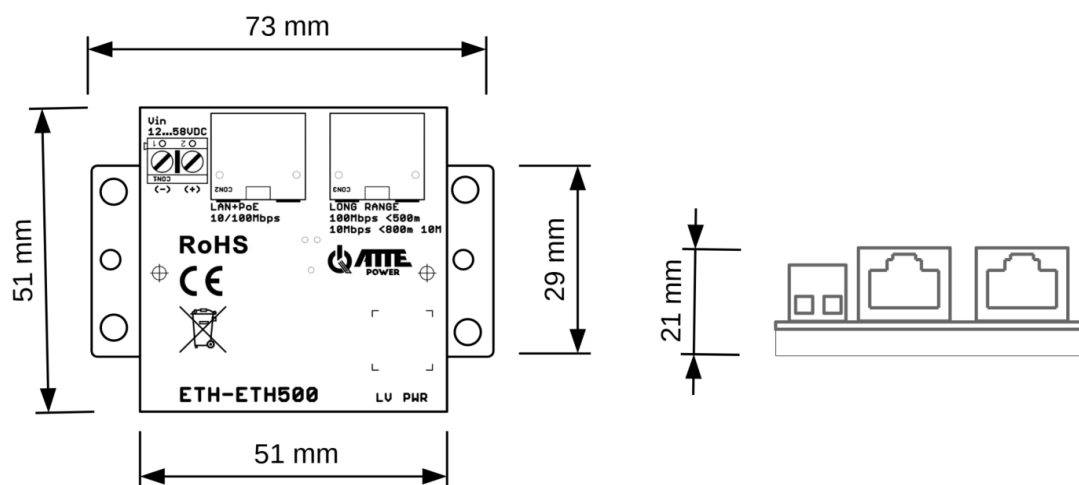
The devices enable the installation of cameras or other IP PoE devices in remote places where installing additional cabling is impossible or unprofitable. It is an economical alternative to cabling based on optical fiber and a separate power line. It will work well in installations in large areas as well as in places where the monitoring system is temporary and where the cost of preparing the cabling is important.

The ETH-ETH500 module is powered by any PoE switch (RJ45 port) and then via a UTP cable, enabling two-way network communication and powering the ETH-ETH500 module with a connected camera. The maximum length of cables in the LONG RANGE track is 800m. A camera or other PoE receiver can be connected to the RJ45 port of the ETH-ETH500 module at the end of the line. The devices can optionally be powered from POWER screw connectors.

The device has a very small size, which allows for easy installation in small spaces.

The housing allows for installation in several ways:

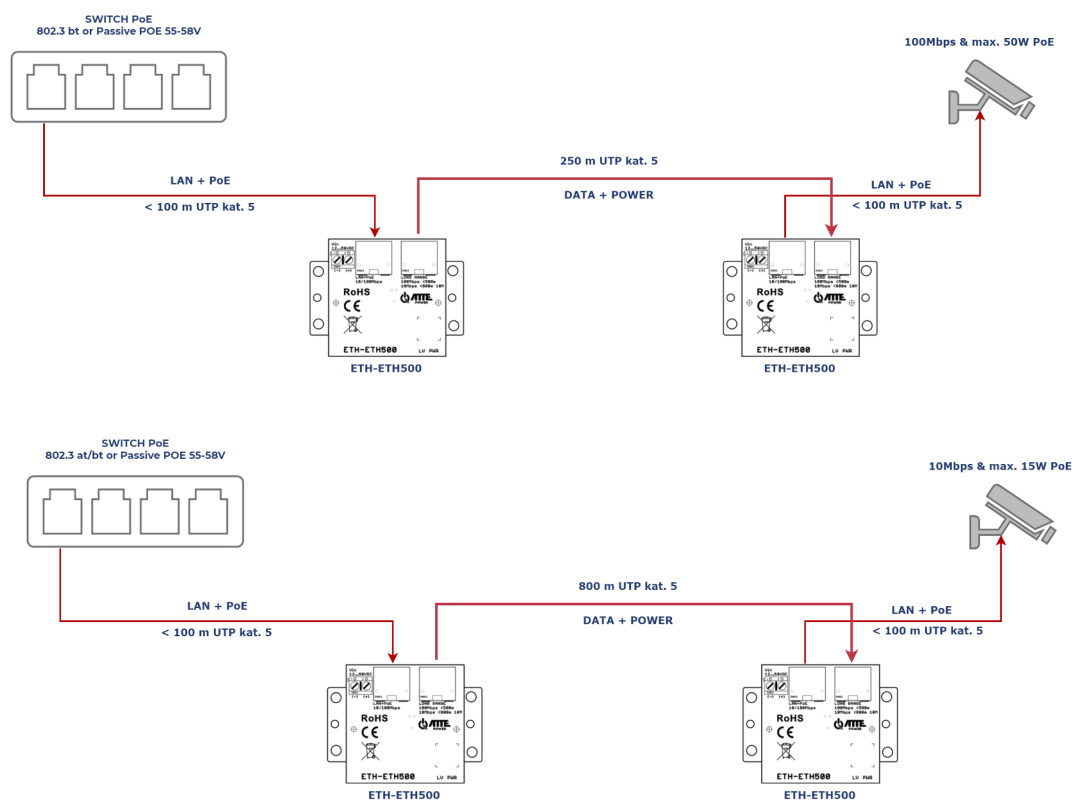
- using mounting pins on a 10.8 grid, which is available in all ABOX housings
- by screwing through additional holes to any flat surface
- using the ADD-RACK2U1 or ADD-RACK2U2 mounting plate
- using additional latches on the TH35 (DIN) ADD-TH35 rail



General view of the device

Technical Specification

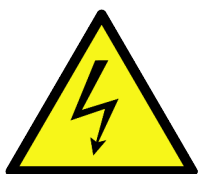
LAN Ports	1 port RJ45 100Mbps 1 port RJ45 100Mbps LONG RANGE
Connectors	2x RJ-45 Screw terminals 0.32-3.3 mm ² (22-12 AWG)
Ports Functions	LAN+POE - LAN+PoE IN&OUT LONG RANGE extended LAN+PoE line
Indication	PWR LED voltage presence LED port RJ45 (żółty) - PoE power supply LED port RJ45 (zielony) - link and data transmission LAN LED 10Mb - link and data transmission LONG RANGE 10Mbps LED LV LowVoltage signaling LED (<44V)
Power Supply Voltage	V _{in} PoE = 44 ... 58 VDC V _{in} = 12 ... 58 VDC
Output Voltage	V _{out} = V _{in}
Power consumption	1,35 W
Maximum distance LONG RANGE line	Maximum distance LONG RANGE line < 250m - UTP 100Mbps power max. 50W POE < 500m - UTP 100Mbps power max. 25W POE < 800m - UTP 10Mbps power max. 15W POE
Length of the network cable	< 100m - distance from SWITCH PoE to ETH-ETH500 < 100m - distance from ETH-ETH500 to PoE Receiver/Camera
Housing Construction	Universal mounting base, mounting studs, TH35 rail with additional bracket, can be screwed to flat surface
Ingress Protection Rating	IP20
Operating Temperature	-25°C...+65°C
Dimensions	51 x 51(73) x 21 mm
Weight	0,026kg



Safety Precautions

- The installation and wiring must be performed by a competent engineer. For permanently connected equipment, a readily accessible disconnect device must be incorporated in the fixed wiring. The device must be connected to the mains supply 230 VAC 50 Hz via a specified fused connection outlet.
- Despite the fact that the enclosure of the device has a high degree of protection, it is recommended that the device should be mounted in places protected from direct influence of atmospheric factors, in particular against rain and direct sunlight.
- Since the power supply does not have a switch to isolate the mains supply, the installer is responsible for notifying the user of the means of isolating the mains supply from the device.
- When replacing fuses, use original or compatible types. The exact parameters of the fuses can be found on the inside of the device cover.

WARNING



Before installation and during maintenance make sure that the mains voltage 230VAC is disconnected

Installation

- Install the set's devices in a place or housing that provides protection against moisture and dust appropriate to the IP20 class.
- Connect the UTP cable of the LONG RANGE track terminated with RJ45 plugs
- Connect the power line from the PoE switch to the Ethernet port of the ETH-ETH500 device
- Optionally, you can power the ETH-ETH500 devices from a 12-58VDC power supply - each device must be powered independently.
- The presence of PoE on the connector and the module power supply are indicated by the yellow LED on the RJ45 port.
- Connect an IP camera to the Ethernet port of the ETH-ETH500 device

After powering up and correctly connecting the cables, the devices communicate at a speed of 100Mbps. If a stable connection cannot be established, the transmission speed will be reduced to 10Mbps. This will be signaled by the diode turning on.

If the connection cannot be established, verify the quality of the RJ45 connectors at the ends of the LONG RANGE track. Additional connections and branches of the LONG RANGE track may prevent the establishment of a stable transmission. You should verify their correctness and remove unnecessary ones.

Operation Indication

PWR LED voltage presence

LED port RJ45 (żółty - PoE power supply)

LED port RJ45 (zielony) - link and data transmission LAN

LED 10Mb – link and data transmission LONG RANGE 10Mbps

LED LV LowVoltage signaling LED (<44V)

WEEE MARKING



This symbol on the product or on its packaging indicates that the product must not be disposed of with normal household waste. Instead such equipment must be disposed of by arranging to return it to a designated collection point for the recycling of waste electrical and electronic equipment.

