

# ANALOG RJ45 ADAPTER

RCP-OEW



## GENERAL DESCRIPTION

The **RJ45 adapter** is a simple interface module, which converts imperix's specific wiring of analog signals – using RJ45 cables – to and from individual signals on an 8-pin push-in terminal block.

Each adapter also features a mounting slot for an **optional load resistor**, typically required by some sensors for current-to-voltage signal conversion.

Analog RJ45 adapters are inherently bidirectional. They can hence interface various sensors with the analog inputs of controllers or, reciprocally, probe signals from their analog outputs.

## KEY FEATURES

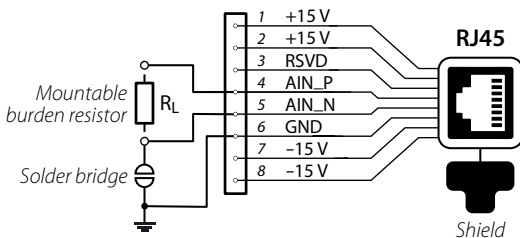
- **Push-in terminals:** Fast and tool-free wiring.
- **DIN rail compatibility:** Mountable on standard 35 mm DIN rails.
- **Shielding:** Dedicated landing pad located under the cable.
- **Bi-directionality:** The boards can be used to interface with analog inputs (all controllers) or analog outputs (B-Box 4 only).

## TECHNICAL SPECIFICATIONS

Parameter	Value
Wire connectors	8x push-in spring terminals
Wire cross-section	0.2 to 0.5 mm <sup>2</sup>
Dimensions	25 x 92.4 x 37.1 mm

## PINOUT

Terminals are numbered 1 to 8, corresponding to the RJ45 pins.

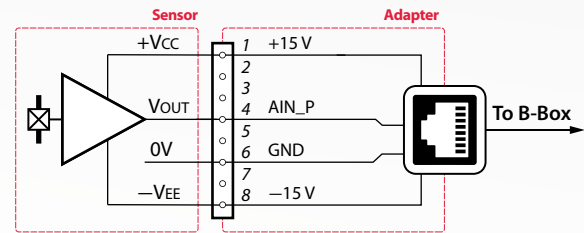


Note: the resistor is not provided/mounted. The jumper is not soldered by default.

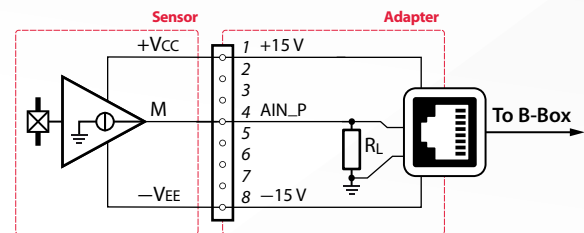
RJ45 pin(s)	Signal	Direction
1, 2	+15V	Provided by the controller
3	RSVD*	N/A
4	AIN_P (Signal +)	From/to the controller
5	AIN_N (Signal -)	From/to the controller
6	GND	N/A
7, 8	-15V	Provided by the controller

\* depends on the controller (GND or 1-Wire). Refer to the controller's datasheet.

## APPLICATION EXAMPLES

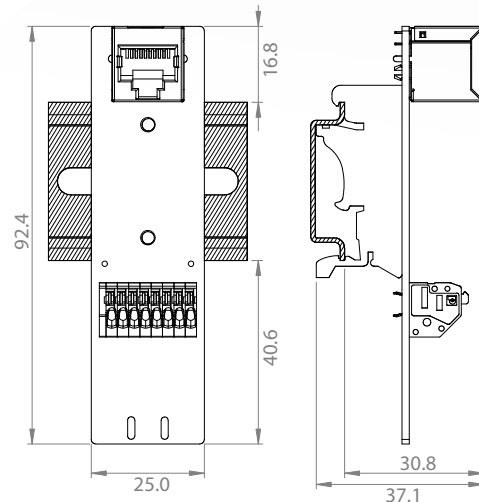


Connection for voltage-mode output:  $R_L$  not mounted, solder bridge open.



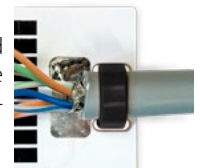
Connection for current-mode output:  $R_L$  mounted, solder bridge shorted.

## MECHANICAL DATA



## SHIELDING AND CABLE RETENTION

The cable shield can be stripped and soldered to the conductive pad located under the cable path. This pad is connected to the RJ45's metallic shield, as shown in the schematic.



## KIT CONTENT

1x analog RJ45 adapter (cables not included)