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# WieHUB

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Wiegand interface splitter / combiner

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# WieHUB

## Catalogue sheet

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## DESCRIPTION

WieHUB is a Wiegand signal converter used to connect various types of barcode readers, 2D codes, contactless readers, etc. It has two input lines and two output lines that are interconnected. Using WieHUB you can both the split one line into two and merge two lines into one. The outputs are galvanically isolated.

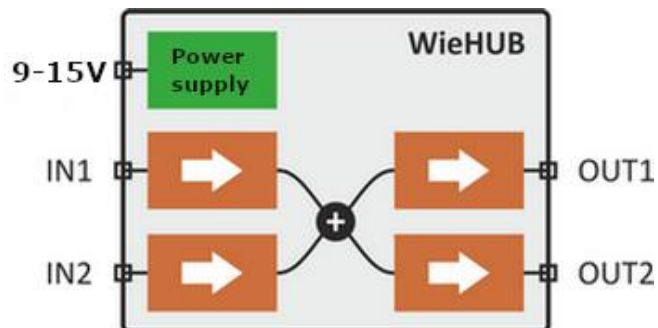


Fig. 1 - block wiring

## Examples of using the WieHUB Wiegand converter

The first example is the connection of one reader with Wiegand output to two systems simultaneously.

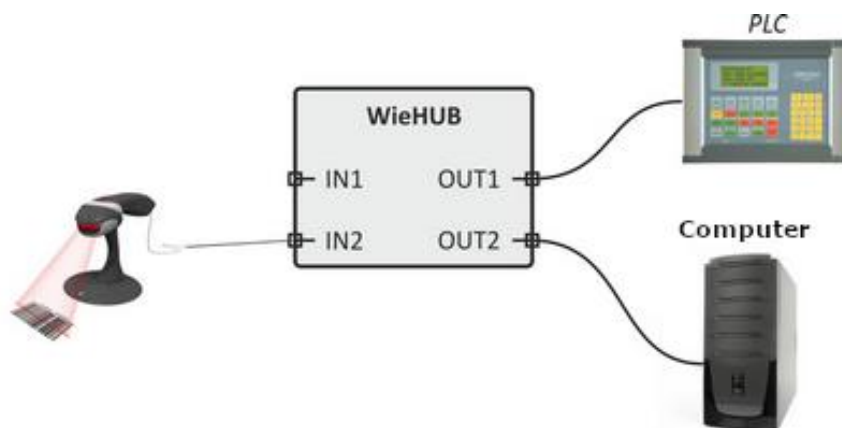


Fig. 2 - connection of one reader to two systems simultaneously

The second example is connecting two readers with Wiegand output to one system. This application is suitable for plants where it is technologically guaranteed that the readers will send data alternately. A situation must not arise where both readers transmit at the same time!

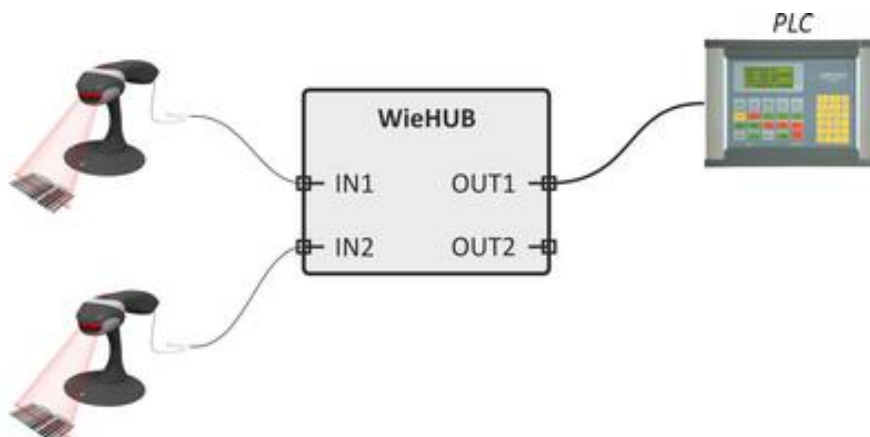


Fig. 3 - connecting two readers to one system

## Features

- Converter for Wiegand interface.
- Two input and two output ports.
- Restoration of voltage levels on lines.
- The input terminals include an output for powering the connected readers.
- Galvanic isolation of outputs - each output is isolated separately.
- Power supply from 9 to 15 V DC.
- Robust design.
- On request with DIN rail mount 35 mm.

## WIRING

Power and signals are connected to the WieHUB using removable screw terminals.



Fig. 4 - Terminal block on the transmitter

**Power** from the 9 to 15 V DC range is connected to the VIN and GND terminals.

The two **input interfaces** of the Wiegand include the standard INxA, INxB and GND terminals as well as a VOUT terminal for the reader power supply. At the **VOUT** terminal, the power supply voltage of the transmitter is behind a surge protector.

**The output interface** simulates the Wiegand reader interface, so it includes the standard OUTxA, OUTxB, GND terminals, as well as the VCCx terminals, which are used to power the resistors that define the idle state of the interface. A supply voltage from the range of 9 to 15 V DC is expected at the VCCx power inputs<sup>1</sup>. Each of the two output interfaces is individually galvanically isolated from the other parts of the converter.

## INDICATIONS

**The PWR** indicator lights up when the power supply voltage is connected.

**The IN1** and **IN2** lights flash when the corresponding reader inputs are communicating.

<sup>1</sup> VCCx is only used to power the internal pull-up resistors. The VCCx inputs do not need to be connected if the pull-up resistors are already present on the opposite device.

**TECHNICAL PARAMETERS**

Communication protocol .....	Wiegand
Power.....	9 to 15 VDC
Power supply reverse polarity protection	yes, diode in series
Current draw .....	typ. 3 mA (without connected peripherals)
Operating temperature .....	-20°C to +60°C
Terminals .....	screw-in, removable
Dimensions .....	71 × 55 × 24 mm
DIN rail mounting 35 mm .....	upon request (optional accessory)
Degree of protection .....	IP40

**Possible modifications**

Do not hesitate to contact us in case of further specific requirements for the module design and functions WieHUB.



# Papouch s.r.o.

Industrial data transmission, line and protocol converters,  
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