

# External RFID card reader - How to connect it to 2N® Helios IP

## External RFID card reader - How to connect it to 2N® Helios IP

If you have in your **2N® Helios IP** internal RFID card reader and you would like to connect another one, you can easily do it by connecting external RFID card reader. External RFID card reader is interconnected with **2N® Helios IP** via Wiegand interface. Used RFID cards must be compatible with EM4002 standard and work on frequency 125 kHz.

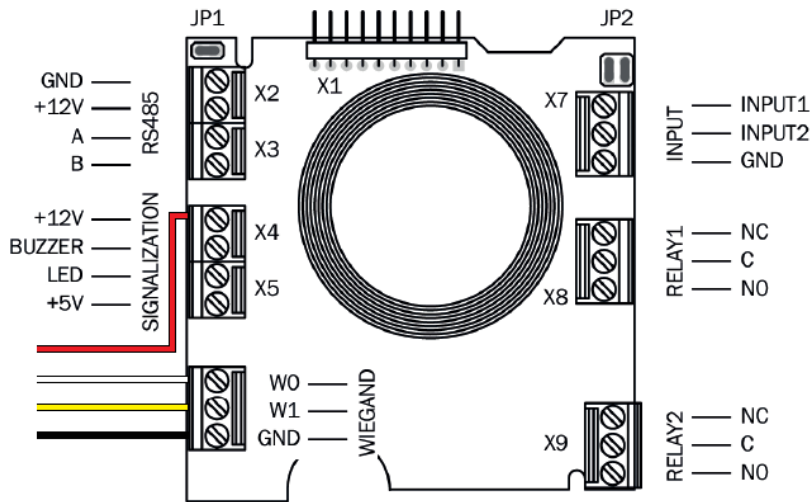
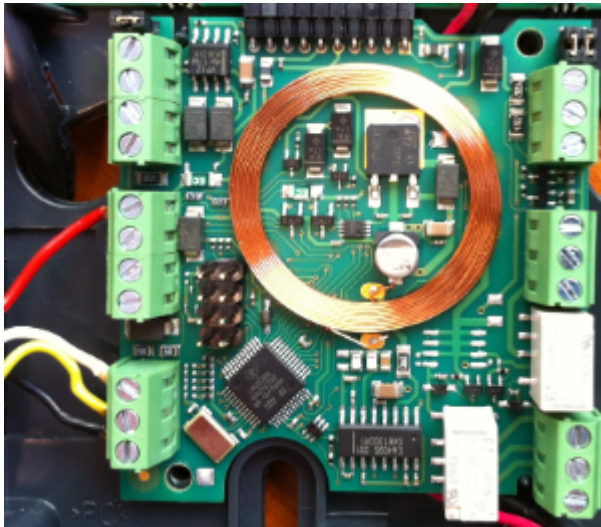


### Electrical Characteristics

- |                           |                                |
|---------------------------|--------------------------------|
| • Operating Voltage range | 8 to 20V DC                    |
| • Current consumption     | Standby 10 mA<br>Maximum 35 mA |
| • Operating frequency     | 125 kHz                        |
| • Read range              | 6 to 12 cm                     |
| • Protection standard     | IP67                           |
| • Cable                   | 2 m, 8-core (AWG24)            |

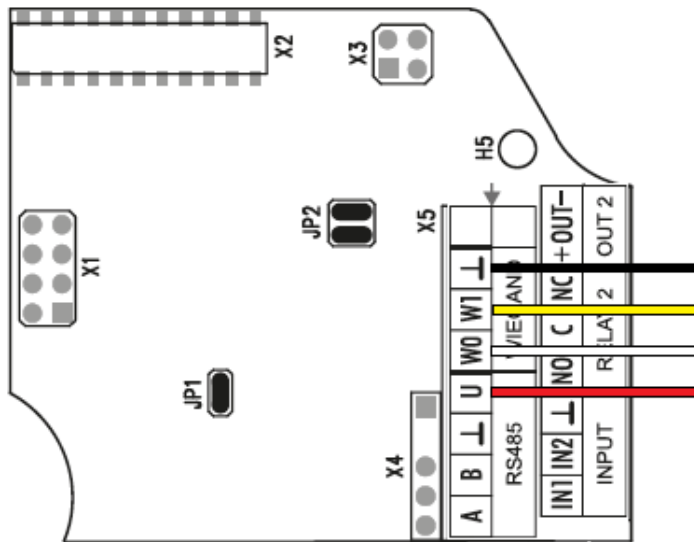
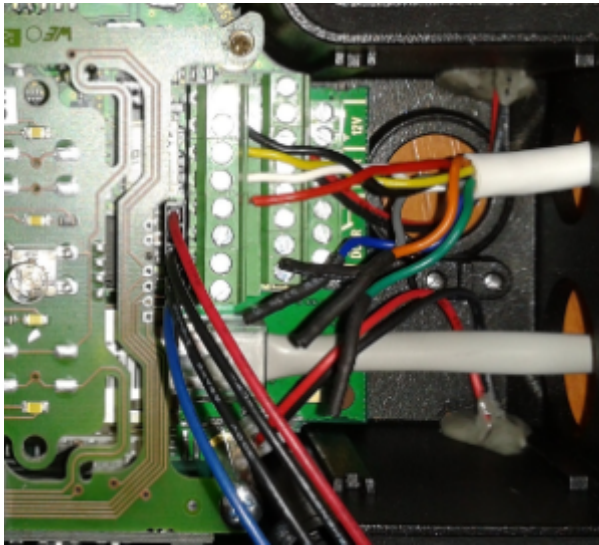
### **2N® Helios IP Vario wiring**

For **2N® Helios IP Vario** connect external card reader according to pictures below. Red wire connected to signalization bus providing card reader with +12 V power. If you are using external power supply, you don't have to connect this cable.



### 2N® Helios IP Force wiring

For 2N® Helios IP Force connect external card reader according to pictures below. Red wire connected to RS485 bus providing card reader with +12 V power. If you are using external power supply, you don't have to connect this cable.



### Configuration

When the wiring is done, go to **2N® Helios IP** web configuration menu and in **Card reader - Module setting** change parameter "Interface mode" to input. By this setting you will specify that **2N® Helios IP** will accept data from external card reader.

**Information**

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**Basic Settings**

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**Advanced Settings**

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**Card reader**

- **Module settings**
- **Installed cards**
- **Access log**

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**Tools**

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### Card reader settings

**Card reader enabled:** Yes ▾

**Accepted HID cards:** 26-bit, H10301 ▾

**Associated switch:** Switch #1 ▾

**Plus card ID:**

**Minus card ID:**

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### Wiegand interface

**Interface mode:** Input ▾

**Change facility code:** No ▾

**Facility code:** 0

Now when everything is set, you should be able to operate internal lock from external RFID card reader. If you enclose the card to reader, you should see orange LED which indicates the card detection.

**More product information:**

Door & Security Intercoms (Official Website 2N)