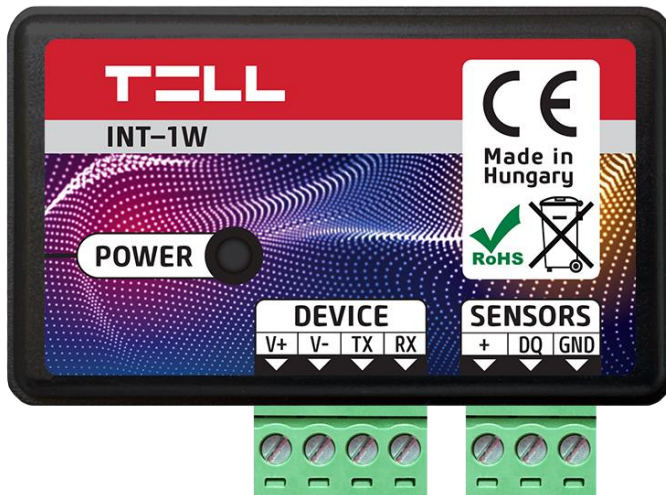


# INT-1W 1-Wire interface

## INSTALLATION AND APPLICATION GUIDE

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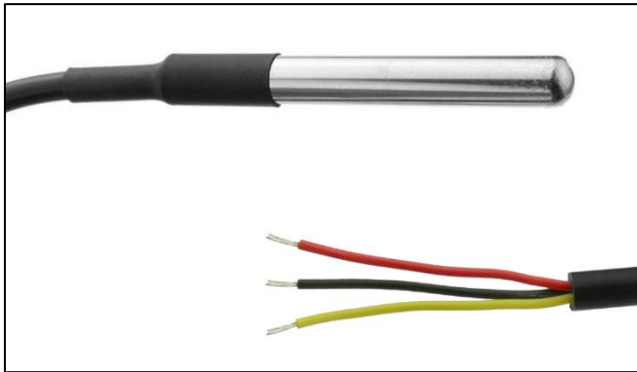


# 1 General information

The **INT-1W** interface is used to adapt **DS18B20 1-Wire temperature sensors** to the following products:

- **Pager8** (supports up to **6** temperature sensors)

## 2 The DS18B20 temperature sensor



Wires:

**Red:** power input (+3.3V DC)

**Black:** power input (GND)

**Yellow:** data output

Data transmission works securely up to a wire length of 10 meters. It may work with a longer cable as well, however, on-site conditions, the cable type, and the value of the pull-up resistor can strongly affect the maximum distance available.

### 3 Terminals and wiring

The **INT-1W** interface has a 3-pin input, and a 4-pin output terminal:

- **Input terminal**

The input terminal is used to connect the temperature sensors. The temperature sensors should be connected in parallel. There is no need for the 4.7kΩ pull-up resistor because this is included in the interface.

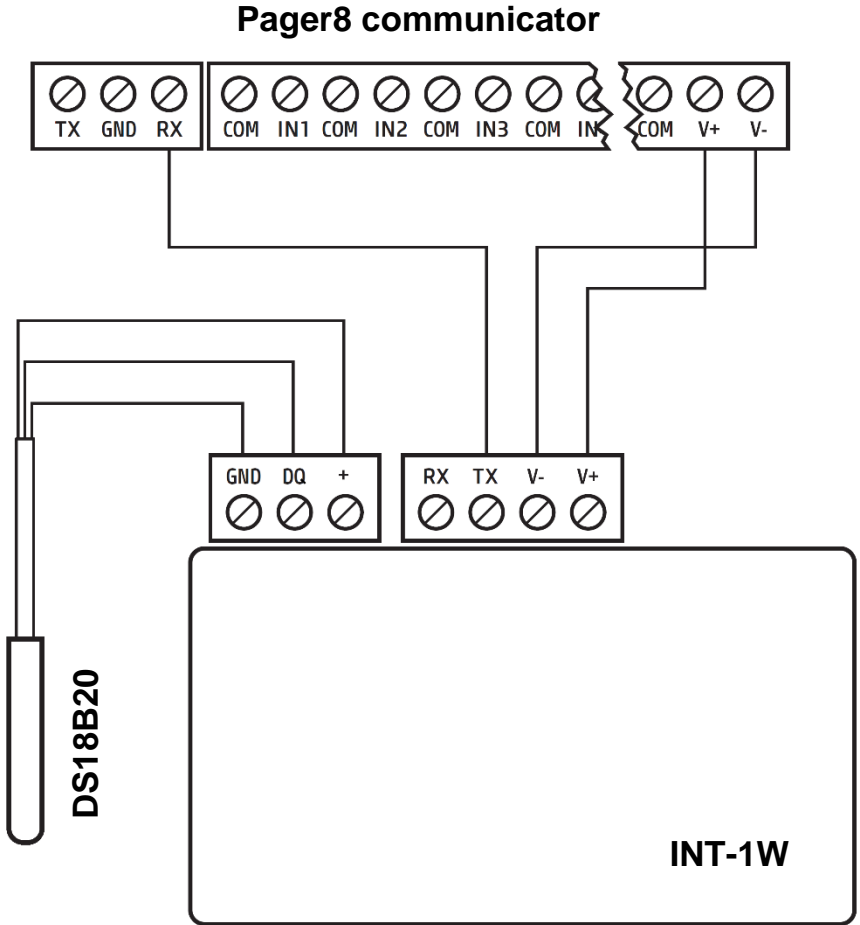
<b>Terminal</b>	<b>Function</b>	<b>Sensor wire</b>
<b>+</b>	Power output for sensors (+3.3V DC)	Red
<b>GND</b>	Power output for sensors (GND)	Black
<b>DQ</b>	Data input	Yellow

- **Output terminal**

The output terminal is used to connect the interface to the communicator.

<b>Terminal</b>	<b>Function</b>	<b>Communicator terminal</b>
<b>V+</b>	Power input (12-30VDC)	<b>V+</b>
<b>V-</b>	Power input (GND)	<b>V-</b>
<b>TX</b>	Data output	<b>RX</b>
<b>RX</b>	Data input (not used)	

- **Wiring diagram**



## 4 Status LED signals

Solid green	Power OK
Not lit	Power error

## 5 Sensor management

The connected sensors are numbered automatically by the interface. If you replace a previously connected sensor with a new one, the interface will assign the next unused serial number to the new sensor. For example, if there are 3 sensors connected, and any of them is replaced, the new sensor will be assigned the serial number 4. If there are already 6 sensors connected, the new sensor will be inserted in the place of the currently missing one. Please keep this in mind when you configure the sensors in the communicator.

**The interface must be powered off when you connect new sensors!**

## 6 Safety instructions

For your safety, please read carefully and follow the instructions below.

Non-compliance with the safety instructions may produce a risk to you and your environment.

- **DO NOT USE** the device where it can cause danger or it can interfere with other devices and interrupt their normal operation (e.g. medical devices).
- **DO NOT USE** the device in high humidity environment and do not expose to chemical or mechanical impact.
- **DO NOT USE** the device beyond the specified operating temperature range.
- **DO NOT INSTALL** the device in hazardous environment.
- **DO NOT TRY** to repair the device yourself. Any repairs must be performed by qualified person only.

## 7 Technical specification

Supply voltage:	12-30V DC
Nominal current consumption:	7 mA
Maximum current consumption:	8 mA
Output voltage:	3.3V DC
Operating temperature:	-20°C...+70°C
Dimensions:	58.5 x 35.7 x 20.8 mm
Weight:	27 g (packed: 80 g)

## 8 Contents of the package

- **INT-1W interface**
- Installation and application guide
- Warranty card

## 9 About the manufacturer

**Company:** T.E.L.L. Software Hungária Kft  
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