

Working with 4-20mA transducers

As the DaqPRO internal operation voltage is +5V having a voltage over 6V on the input can cause a malfunction or give wrong readings when sampling other inputs.

To avoid this situation the DaqPRO tests all inputs before starting a logging session and declares "Over Voltage" if a certain input is over 6V.

To work with 4-20mA transducers which have a supply voltage greater than 6V:

1. Connect a 200-500 Ohm shunt resistor(200 Ohm resistor is supplied with the DaqPRO) in parallel to DaqPRO's input terminals as a constant load (we recommend using the supplied terminals with built in, high accuracy, 200 Ohm shunt)
2. Define the sensor based on **Current (Shunt)**
3. In the **Shunt Resistor** edit box type in the resistor's value
4. Proceed to define the sensor as in the normal procedure

As an example, let's look at a 0-100bar 4-20mA transducer which has a supply voltage of 24V. We can define the sensor as:

4mA \leftrightarrow 0 Bar

20mA \leftrightarrow 100 Bar

So the definition parameters will be:

Define New Sensor

Defined sensors list :

- Dif pres 1
- Dif Pers 2
- Turbid In
- Turbid Out
- My I
- Pressure

Sensor name: Pressure

Sensor unit: bar

Based on : Current (Shunt)

Shunt Resistor: 200 Ohm

Calibration values:

	Output Current	Real value
Value #1:	4	0
Value #2:	20	100

Add new sensor

Restore defaults

OK Cancel