

One-wire temperature sensor:

The one-wire temperature sensor can be connected to J14, see image 1

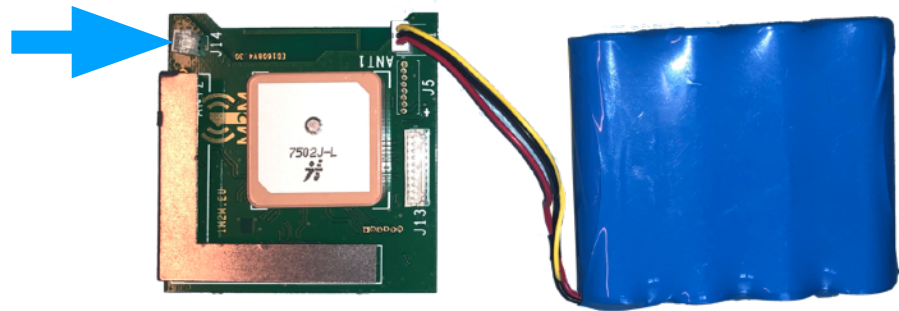
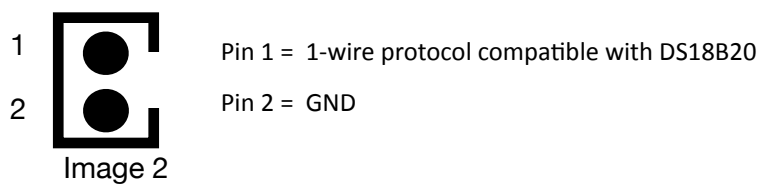


Image 1

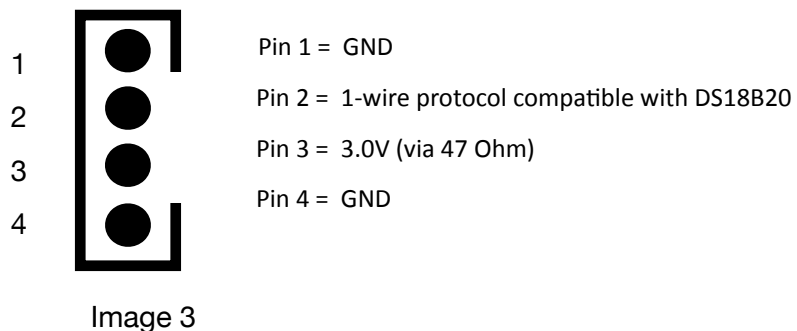
J14, 2-pin connector

There are two versions of the one wire connection. Older units will have the 2-pin connector and therefore need an extra power supply which can be connected to J13 pin 3.



J14, 4-pin connector

The newer ED1608 boards have a 4-pin connector for the one-wire sensor..



Interface connections on J13 (see images 4 and 5):

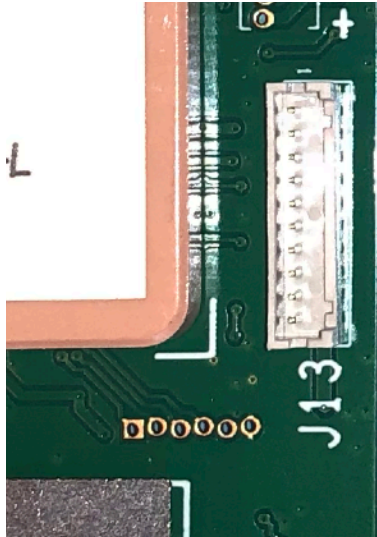
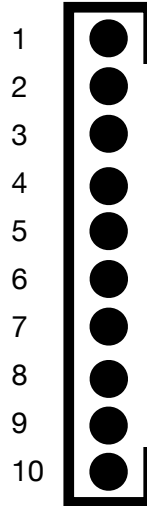


image 4



- Pin 1 = GND
- Pin 2 = Input, external voltage
- Pin 3 = Output 3.0V (max. 50mA)
- Pin 4 = GND
- Pin 5 = Switched 5V output (max100mA)
- Pin 6 = Digital I/O 1 / UART RX
- Pin 7 = Digital I/O 2 / UART TX
- Pin 8 = Analog input / I/O 1
- Pin 9 = Analog input / I/O 2
- Pin 10 = GND

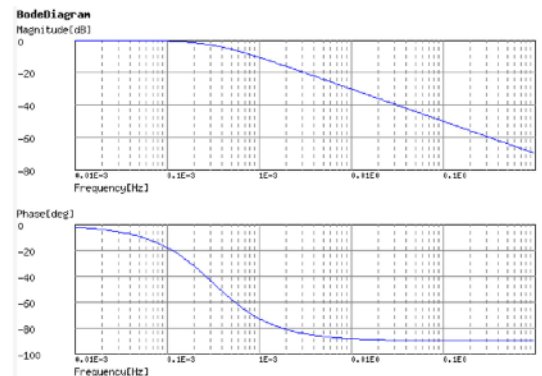
All voltages max. 5V except pin 2, max 5,5V

image 5

Analog inputs:

Pin 8 and 9 are analog inputs. **Warning! Both inputs are equipped with an overvoltage protection, so do not connect voltages higher than 5V.**

Input impedance of both analog inputs is 400KOhm to ground. The circuit has a 1st order low-pass filter with -3dB at 300Hz.



4-20mA input circuit example for analog pin 9:

image 6

To connect a 4-20mA sensor to the ED1608 you can use one of the analog pins in combination with a 200 Ohm resistor (100mW). On request 1M2M can deliver this special cable.

