

EMS 3 Temperature Calibration Procedure

Select **ANALOG CH1,2,3 or 4**

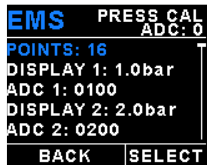
Select **MODE** PRESSURE or TEMPERATURE

Select **TYPE** :

- **RESISTIVE** for single wire sensors
- **VOLTAGE** for sensors that supply a voltage (0-5)
- **CURRENT** for 4-20mA sensors

Sender **SENDER** :type : **USER**

Select **CALIBRATE SENDER**



ADC: 0

This is the live display of the input voltage from your sensor in mV

POINTS: 16

Choose the number of calibration points you are going to use - the more you choose the more accurate the reading. Only 2 are needed for linear sensor, non-linear sensors are more accurate the more points you use.

DISPLAY 1,2,3 to 16: [...] example "1.0"bar

This is the value you want displayed on the screen...

ADC 1,2,3 to 16: [...] example "0100"

...when the ADC input voltage is this value

CALIBRATION

For example: We choose to use 5 calibration points from 20 deg C upwards.

POINTS= 5

For point # 1

Place the temp sender at 20 deg C and let the ADC value stabilize.

Read the ADC value: [value@20degc]

Enter this value into the ADC 1 = [value@20degc]

DISPLAY 1: [20]

Now for point #2

Place the temp sender at 40 deg C and let the ADC value stabilize.

Read the ADC value: [value@40degc]

Enter this value into the ADC 2 = [value@40degc]

DISPLAY 2: [40]

Now for point #3

Place the temp sender at 60 deg C and let the ADC value stabilize.

Read the ADC value: [value@60degc]

Enter this value into the ADC 3 = [value@60degc]

DISPLAY 3: [60]

and so on until all values are entered.

It is often easier to start at a high temperature and let the temperature cool as you set the values.