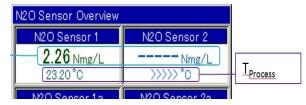


## Correcting N<sub>2</sub>O Sensor Temperature Offset on Long Cables

The  $N_2O$  Wastewater Sensor Body has a temperature sensor (PT100; 3-wire) which based on resistivity, reports the water temperature changes. As longer cables have a variable cable resistivity, the PT100 sensor signal may have an offset, in some cases up to 4°C. The true process temperature, as measured by another temperature probe is then used in the  $N_2O$  Wastewater System temperature compensation. Follow these steps to do this:

 Assess if a temperature correction is needed by comparing the N<sub>2</sub>O Wastewater Sensor temperature with other process sensors temperature readings (in SCADA or on-site sensor systems). The N<sub>2</sub>O Wastewater Sensor temperature signal is found in the main screen.



- 2. If a correction is needed, open the menu system in the lower left corner and login as 'MASTER' with pin code '9200'.
- 3. Enter the 'Configuration' menu.
- 4. Enter 'Analog Inputs' sub-menu.
- 5. Find the corresponding Temperature input channel for sensor 1 or sensor 2.
- 6. Find the value called 'Offset' and press the yellow field. An input window will popup.
- 7. Enter the positive or negative offset value that will correct the temperature to the true value.
- 8. Finally, press the 'OK' button and exit the menu.
- 9. Double check that the new temperature is showing the true process temperature.



