

Correcting N₂O Sensor Temperature Offset on Long Cables

The N₂O 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 N₂O Wastewater System temperature compensation.

Follow these steps to do this:

1. Assess if a temperature correction is needed by comparing the N₂O Wastewater Sensor temperature with other process sensors temperature readings (in SCADA or on-site sensor systems). The N₂O 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.

