

INTERCHANGEABILITY OF SENSORS IN PGM-35 & PGM-50

The following Technical Note describes the interchangeability of ToxiRAE (PGM-35) and MultiRAE (PGM-50) units and the requirements for re-calibration after changing sensors.

INTERCHANGEABILITY

- Sensors for the PGM-35 and PGM-50 have different part numbers and are not interchangeable between the different types of instruments.
- In the ToxiRAE single gas monitors (PGM-35), the HCN, NH₃, PH₃ and ClO₂ sensors (P/N 007-1117, 18, 19 & 20) *are not* interchangeable because of microprocessor limitations, and a dedicated unit must be used. The NO sensor is interchangeable with the other 5 standard sensors (H₂S, CO, NO₂, SO₂, & Cl₂) even though it has a bias (see below).
- In the MultiRAE, the HCN and PH₃ sensors (P/N 008-1117 & 9) *are* interchangeable. The NH₃ and NO sensors require an electrical bias and can only be placed in the Sensor #1 position. Note that there is a switch inside the MultiRAE (to the right of the LCD and behind the Mode key) that allows turning the bias on or off depending on the sensor installed. Thus, in the MultiRAE it is possible to have any combination of sensors except having both The NH₃ and NO at the same time.

RECALIBRATION

The ToxiRAE and MultiRAE remember only the last calibration on a given sensor position. If a sensor is traded out, one needs to allow about one hour equilibration for the new sensor and then must recalibrate. In the case of sensors with an electrical bias (NH₃ and NO), the user needs to equilibrate about 24 hours before recalibrating. Although not as important, we recommend recalibrating whenever a sensor is removed, even if the same one is replaced immediately.