

Formula

Type: Methane Sensor METS

Serial number: **T41-E212**

$$c = \exp \left[1,961 * \ln \left\{ \left(0,587 + 1,256 * \exp \frac{-V_t}{0,451} \right) * \left(\frac{1}{V_{CH4}} - \frac{1}{-0,713 + 14,386 * \exp \frac{-V_t}{0,835}} \right) \right\} \right]$$

$$t = (V_t * 22,69) - 3,93$$

O₂ correction:

$$c_{CH4}(corr) = \left(-0,051 + 0,071 * \exp \frac{c_{O2}}{37,113} \right) * c_{CH4}$$

c_{CH4} = methane concentration [μmol/l]

t = gas temperature [°C]

V_{CH4} = methane voltage [V]

V_t = temperature voltage [V]

c_{O2} = O₂ concentration [%]

Methane range: 10 nmol/l - 1 μmol/l

Temperature range: 10 – 30 °C

Calibrator : J.G.

Managing Director : M.M.

Date :