

Formula

Type: Methane Sensor METS

Serial number: **G70-E284**

$$c = \exp \left[1,445 * \ln \left\{ \left(0,048 + 5,610 * \exp \frac{-V_t}{0,646} \right) * \left(\frac{1}{V_{CH4}} - \frac{1}{-4,266 + 10,881 * \exp \frac{-V_t}{3,692}} \right) \right\} \right]$$

$$t = (V_t * 22,78) - 4,35$$

O₂ correction:

$$c_{CH4}(corr) = \left(-0,586 + 0,654 * \exp \frac{c_{O2}}{111,834} \right) * c_{CH4}$$

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: 100 nmol/l - 10 μmol/l

Temperature range: 10 – 30 °C

Calibrator : J.G.

Managing Director : M.M.

Date :