CID Bio-Science Inc.
Portable Instruments for Precision Plant Measurement

CI-340 Equations

2a. P_n: Net Photosynthesis rate (µmol/m²/s) for an ***open system.***

$$P_n = -W \times (C_o - C_i) = -2005.39 \times \frac{V \times P}{T_a \times A} \times (C_o - C_i)$$

Where $C_o (C_i)$: outlet (inlet) CO_2 concentration (ppm or µmol/m²/s)

2b. P_n: Net Photosynthesis rate (µmol/m²/s) for a ***closed system.***

$$P_n = 120323.35 \times \frac{V \times P \times \Delta C}{\Delta t \times T_a \times A} = W \times \Delta C$$

Where ΔC: CO_2 decrement form the initial reading (µmol/m²/s)