



The PID sucks the air containing VOC's across the surface of the PID's lamp window. The lamp gives off high UV energy photons. The PID measures the VOC's in the air using Photo Ionisation, this occurs when the UV Photons are absorbed by VOC Molecules, in this case the molecule XY, This creates two IONS, X+ and Y-. One is positively charged and one negatively charged. These Ions are then neutralised by the movement of a tiny electric current between two electrodes, this current is the 'photo ionisation current' which is proportional to the concentration of 'XY' which can then be amplified and displayed as a concentration.