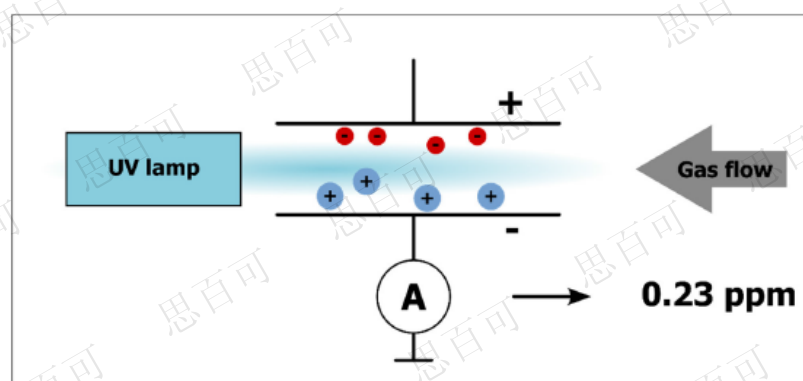


光电离工作原理:

Photo ionization working principal

The LAB PID working principle based on the molecular photo effect. That means all vaporous organic compounds give up an electron if they hit by a photon with higher energy than the minimum ionization energy of the molecule. As a result of this ionization the molecules are not longer neutral and begin to drift to the negative electrode of the applied electrical field. Once arrived on the negative charged sense electrode the gas ions capture an electron from the electrode and produce so a current which is being measured. The produced free electrons drift in the opposite direction and being captured by the bias electrode. The ions and electrons drift make closed circuit where the measurement current begins to flow.



特性:

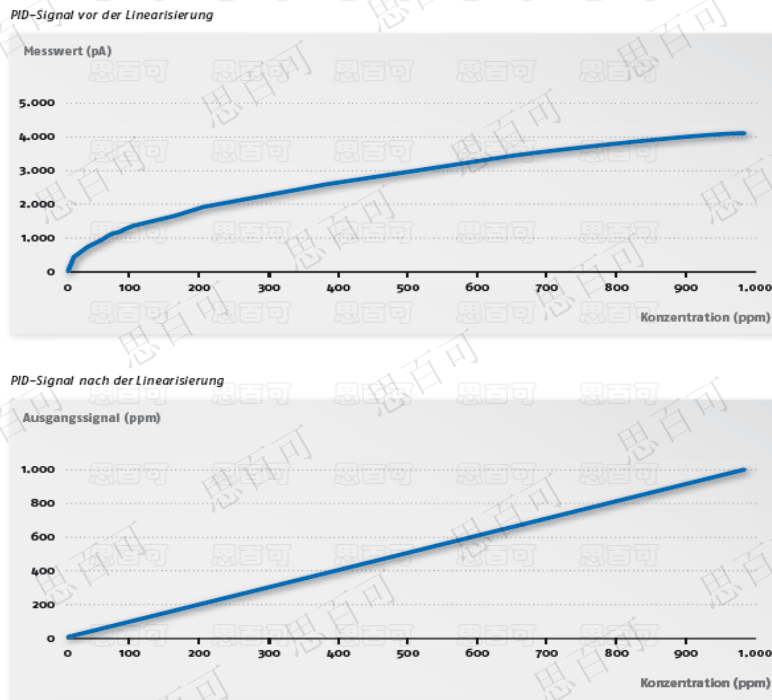
Measurement features

Measuring principle	VUV-Photo ionization with 10,6 eV lamp
Measurement range	0 ... 2.000 ppm ISOBUTENE
Lower detection limit	Depends on compound, up to 10 ppb in relation to ISOBUTENE at air *
Resolution	10 ppb ISOBUTENE or $\pm 2\%$ full scale *
Signal integrity	0 ... 100 ppm > 98% *
Response time	Sensor T90 < 10 sec. ISOBUTENE equivalent
Humidity influence	Humidity compensation in the range of 0 ... 90 %rH
Gas sampling	Built-in electrical pump (approx. 300 ml/min.)
Lamp life time	Guaranteed 5.000 hours, typical > 10.000 hours
Filter cartridge	Charcoal filter to improve long term stability (changeable)

* Resolution will be accomplished under laboratory conditions with certified calibration gas

实验室光电离检测器——最大特点就是测量数据非线性进行线性拟合以及温湿度补偿，进而实现了高精度的物质成分测量

特点1 ——线性拟合功能



特点2 ——温度和湿度补偿功能

