

Compur Statox 501 PID **Detector for Volatile Organic Compounds - VOC**



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Statox 501 PID The Allrounder

PIDs (Photo – Ionisation – Detectors) detect VOCs (Volatile Organic Compounds) in the ppm range, which other sensor types are unable to monitor, like solvents and fuels.

A PID sensor uses high energy ultra violet light radiation to break gas molecules into radicals, which are discharged while passing a condenser. The discharge current increases proportional to the number of molecules, i. e. the gas concentration.

The standard Statox 501 PID will detect all substances with a ionization energy below 10.6 eV.

PIDs are easily calibrated with Isobutene. This substance is easily accessible and not dangerous in low concentrations. Other substances will be detected with different sensitivity. The response factors to these substances must be allowed for calibration. Therefore every sensor interface is individually hardware – programmed to its specific application.

The Statox 501 PID is operated with a magnetic pin, activating Hall sensors inside the interface. A multi – color LED leads the user through an easy to understand menu.

The Statox 501 PID output is a linear voltage signal, similar to the signal of a catalytic sensor. Its Control Module transforms it into a standard 4 - 20 mA signal. Three powerful relays can trigger external alarm devices or control ventilation systems.

Technical Data	
Detectable Gases	Volatile substances with a ionisation potential below 10,6 eV
Measuring programs	0 – 10.0, 0 - 100, 0 - 1000, 0 – 10,000 ppm
Measuring principle	Photo - ionisation
Response time	Isobutene: $t_{90} < 10$ s
Operating temperature	- 30 - + 60°C
Humidity	0 - 95 % r. H. , non condensing
Pressure	700 - 1300 hPa
Power supply	4,6 - 5,6 VDC
Current	50 mA, initial current max. 150 mA for max. 0,3 sec.
Connection	3 - Wire
Operation	With Statox 503 Control Module
Weight	1,0 kg, 2,2 lbs
Dimensions	160 x 130 x 60 mm HxWxD 6,3 x 5,1 x 2,36 in
Material: Housing Interface	Cast aluminium coated stainless steel
Protection class	IP 54



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