

Pellistor Replacement Infra-red



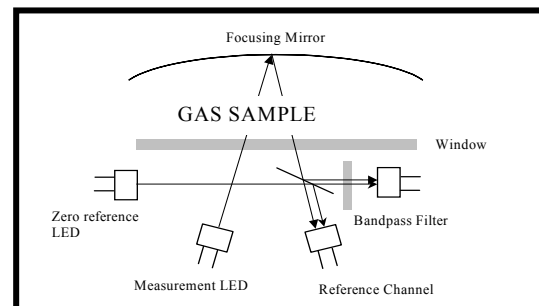
- Sinter free failsafe operation with error and fault reporting functions
- Calibration >2 years (SIL2 verification)
- Hydrocarbon detection 0 to 100% LEL
- LED based infra-red measurement
- Diffusion and Flow Cell Options
- Ex Hazardous area approved (ATEX)
- Vibration & shock resistant
- MTBF of >30 years
- All stainless steel construction
- Weather proof to IP67
- Immune to effects of rain & mist
- Operating temp options -40°C to + 70°C
- + or – bridge type output
- Compatible with all existing systems

Description

The LEDPoint® PRS is a hydrocarbon detector specifically designed to offer a cost-effective alternative to Pellistor or Catalytic based flammable gas point sensors.

The LEDPoint® PRS consists of the AMGas dual beam, dual wavelength, infrared LED (light emitting diode) based, Patented, gas sensor cell plus all drive electronics required to give a temperature corrected, linear output proportional to gas concentration. This interface duplicates standard Pellistor outputs enabling the LEDPoint® PRS to be used with existing wiring, monitoring, power supply and junction box installations.

The LEDPoint® PRS can be used in the harshest environments and, as it can be fitted to existing power and signal wiring, it is a true “plug and play” replacement for existing pellistor type sensors.



Third Party Approvals & Assessments

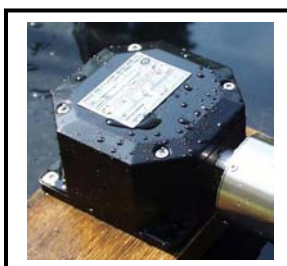
Agency	Title	Reference Number
Sira Certification Services	ATEX Hazardous Area Approval	00ATEX5120
Sira Test Services	BS EN 61779 Performance Test	C1218
Shell Global Solutions	Shell Research – Technical Report	OP.01.30691
Micropack (on behalf of BP)	Gas Detection Evaluation Report	203.0037

Technical Data:

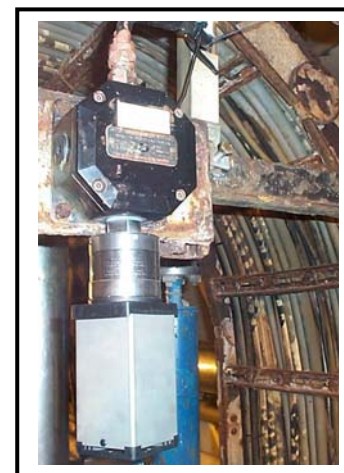
Detection Ranges	0 – 100% LEL Calibrated for methane or propane
Operating temperature range	-20°C to + 45°C (-40 °C & 70 °C temperature versions available)
Humidity	0 - 99% non-condensing
Response time T ₉₀	15 sec (varies with splashguard) 5 sec High speed HS option
Gas detection performance	Meets or exceeds the requirements of BS EN61779-1 and BS EN61779-4: 2000 for stability and temperature response for methane calibration
Start up time	6 Minutes
Input voltage/Power consumption	+3 - 5 VDC, 200 mA – 450mA constant current, 2 Watts maximum Maximum input voltage +6 VDC, max input current 450 mA
Standard unit calibrated for linear output for methane	Negative output units Typ. -16 mV per % gas, Option NM (negative methane) Positive output units Typ. +28 mV per % gas. Option PM (positive methane) 0 - 100% LEL (standard range) 105+% over range indication,
Fault indications	Standard fault output DC – 15% LEL equivalent output Optional error reporting output 1/ Output switches between -10% LEL and the gas reading every 10 seconds, signalling obscured optics, system calibration due indication. 2/ Output switching between -10% LEL and the gas reading every 5 or 15 seconds or continuous shows unit internal failure – remove from service and return to AMGas for rectification.
Target Gases	Responds to all gaseous aliphatic hydrocarbons
Connections	3 Wire, 0V, +V, Centre tap signal
Construction	Stainless steel and acetyl
Weight and dimensions	192 mm x 65 mm dia. 1.5kgm excluding splashguard
Mounting orientation	Vertical or horizontal with appropriate splashguard or flow through cell
Mounting method	M20 Fine Threaded screw for insertion in Hawke Exe junction box or similar
Electrical connections	Three wire through M20 Fine screw centre
Weather protection	Options i/ Splashguard for vertical or horizontal mounting for use in external off-shore environment – supplied as standard ii/ Dust filter for internal environment iii/ Flow cell version – order FC variant
Approvals	CE (Ex) II 2 G EEx m ia IICT4 (UL & CSA pending)



Optics Cleaning Kit



Optional Junction Box



Examples of North Sea Offshore Installations

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