

Searchpoint Optima Plus – Infrared Point Gas Detector

Searchpoint Optima Plus is an infrared point flammable gas detector certified for use in potentially explosive atmospheres. The infrared detection principle offers the fastest speed of response, reduced routine maintenance and failsafe operation, when compared to conventional electro-catalytic based gas detectors. Advanced internal fault diagnostics and false alarm rejection algorithms ensures that **Searchpoint Optima Plus** delivers the highest level of operational integrity.



Benefits

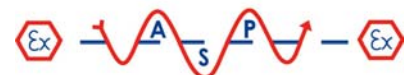
- Fast speed of response
- Dual channel, fully compensated infrared optical configuration
- Failsafe operation
- Immune to catalytic poisons
- Increased availability
- False alarm rejection with $\sqrt{2}$ Software™
- Works in inert atmospheres
- Reduced routine maintenance
- Advanced integral fault diagnostics
- Optional Modbus RS485 multidrop output

Accessories

- DVC or DX100(M) Modbus Interface
- Standard weather protection
- Sunshade/deluge protection
- Storm baffle
- Dust barrier
- Gassing cap
- Remote gassing cell
- Duct mounting kit
- Flow housing
- Hand held interrogator

Applications

- Offshore oil and gas platforms
- Floating Production Storage & Offloading (FPSO) vessels
- Tankers
- Onshore oil & gas terminals
- Refineries
- LNG/LPG bottling plants
- Gas turbine power plants
- Solvent printing and coating plants
- Distilleries
- Gas compressor/metering stations





General Specification

Output	
Measuring range	4 to 20mA sink or source, (Default current source)
Inhibit	1-3mA (Default 2mA)
Warning	0-4mA (Default 4mA)
Fault	0mA
Over range	20-21.5mA (Default 21mA)
Digital output	Optional Modbus RS485 multidrop output using DVC/DX100(M)
Weight	1.6kg
Accuracy	
Optima PLUS (HC)	Baseline $\leq \pm 1\%$ LEL, 50% FSD $\leq \pm 2\%$ LEL
Optima PLUS (ET)	Baseline $\leq \pm 2\%$ LEL, 50% FSD $\leq \pm 3\%$ LEL
Repeatability	$\leq \pm 2\%$ LEL at LEL 50% FSD
Linearity	$\leq 5\%$ FSD
Response time	$T_{50} < 4.5$ seconds, $T_{90} < 6.5$ seconds (for methane, including weather protection)
Operational and certified	-40°C to +65°C temperature range
Drift with time and over temperature range	-40°C to +65°C Baseline $\leq \pm 2\%$ LEL, 50% FSD $\leq \pm 4\%$ LEL
Drift with pressure	0.1% (of reading) per mbar
Power supply	18-32V (24V nom) DC, <4.5W max
Environmental protection	IP66/67
Diagnostics (and re-calibration)	Via certified Hand Held Interrogator
Safety approvals	GENELEC (BASEEFA), SAA EX II 2G EEx d IIC T5 (Tamb -40°C to +55°C) T4 (Tamb -40°C to +65°C) UL/CSA: Class 1, Div 1, Groups B, C + D (-40°C to +65°C) FTZU, BKI, GOSST
Performance approvals	DMT and FM Applied for
EMC compliance	EN 50081-1: 1992 EN 50082-2: 1995
Calibrations available	Calibrations for over 100 gases and vapors available. Other gases and vapors available.
Standard Calibrations	Methane 100%LEL, Ethane 100%LEL, Propane 100%LEL, Butane 100%LEL, Ethylene/Ethene 100%LEL, Methane 100%UEG (DMT Approved), Ethane 100%UEG (DMT Approved), Propane 100%UEG (DMT Approved), Butane 100%UEG (DMT Approved), Ethylene 100%UEG (DMT Approved).
Special Calibrations	Hexamethyldisiloxane 100%LEL, Butan-1-OL 100%LEL, Butanol-1 100%UEG, N-ButylAcetate 100%LEL, N-Butylacetat 100%UEG, Butanone (Mek) 100%LEL, Butanon 100%UEG, Cyclohexane 100%LEL, Cyclohexan 100%UEG, Cyclohexanone 100%LEL, Cyclohexanon 100%UEG, Ethanol 100%LEL, Aethanol 100%UEG, EthylAcetate 100%LEL, Ethylacetat 100%UEG, N-Heptane 100%LEL, N-Heptan 100%UEG, N-Hexane 100%LEL, N-Hexan 100%UEG, Propan-2-OL 100%LEL, Propanol-2 100%UEG, N-PropylAcetate 100%LEL, Propylacetat-N 100%UEG, Methanol 100%LEL, Methanol 100%UEG, Benzin 60/95 (Mixture) 100%UEG, Di-Ethylether 100%LEL, Ethylether 100%UEG, Methane 100%V/V, N-Pentane 100%LEL, AVTUR/JP8 (Aviation Fuel Mixture) 100%LEL, Di-Methyl Ether 100%LEL, Decamethyltetrasiloxane 100%LEL, N-Octane 100%LEL, N-Octane 100%UEG, Octamethyltetrasiloxane 100%LEL, Di-Methyl Formamide 100%LEL, JP1 (Aviation Fuel Mixture) 100%LEL, Methyl Iso Butyl Ketone 100%LEL, I-Butane 100%LEL, I-Butane 100% UEG, Pent-1-Ene 100%LEL, I-Propyl Acetate 100%LEL, 1-Methoxy-2-Propanol 100%LEL, 3-Ethoxy-1-Propanol 100%LEL, Oct-1-Ene 100%LEL, Hex-1-Ene 100%LEL, Chloroethane 100%LEL, N-Propanol 100%LEL, Methane 10%V/V, Propene 5%V/V, 1-Methoxy-2-Propanol 100%, 3-Ethoxy-1-Propanol 100%UEG, Benzin 80/110 (Mixture) 100%UEG, Propane 50%UEG, Di-Methyl Ether 100%UEG, Propane 40%V/V, Propylene Glycol Methyl Ether Acetate 100%LEL, Propane 60%V/V, Propane 20,000ppm, Butane 18,000ppm, Methyl I Amyl Ketone 100%UEG, Band A High IR 100%LEL, Band B High IR 100%LEL, Propylen 100%UEG, Propan (DMT Approved) 5,000ppm
Custom Calibrations	Propylene 100%LEL, Acetone 100% LEL, Aceton 100%UEG, Toluene 100%LEL, Toluol 100%UEG, O-Xylene 100%LEL, O-Xylol 100%UEG, P-Xylene 100%LEL, P-Xylol 100%UEG, Ethene 10%V/V, Propane 10%V/V, 1,2-Dichloroethane 100%UEG, Band C Medium IR 100%LEL, Band D Low IR 100%LEL, Benzene 100%LEL, Styrene 100%LEL, 1,3 Butadiene 100%LEL.

Note: † Only available on Ethylene version Searchpoint Optima Plus.

Supplied by:

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