

Searchpoint Optima Plus

in the Zone™

Advanced infrared point gas detector

Searchline 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; known as **✓² Software™**; ensures that **Searchpoint Optima Plus** delivers the highest level of operational integrity.



Benefits

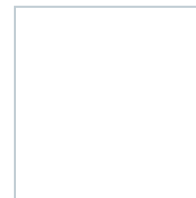
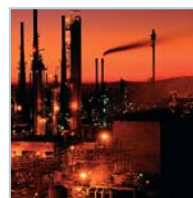
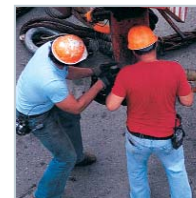
- Fast speed of response
- Dual channel, fully compensated infrared optical configuration
- Failsafe operation
- Immune to catalytic poisons
- Increased availability
- False alarm rejection with **✓² Software™**
- No moving parts
- Works in inert atmospheres
- Reduced routine maintenance
- Advanced integral 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



z lumidor

z mda scientific

z neotronics

z sieger

General Specification

Output	Measuring range Inhibit Warning Fault Over range	4 to 20mA sink or source, (Default current source) 1-3mA (Default 2mA) 0-4mA (Default 4mA) 0mA 20-21.5mA (Default 21mA)
Digital output		Optional Modbus RS485 multidrop output using DVC/DX100(M)
Weight		1.6kg
Accuracy Optima PLUS (HC) Optima PLUS (ET)		Baseline $\pm 1\%$ LEL, 50% FSD $\pm 2\%$ LEL Baseline $\pm 2\%$ LEL, 50% FSD $\pm 3\%$ LEL
Repeatability		$\pm 2\%$ LEL at LEL 50% FSD
Linearity		$< 5\%$ FSD
Response time		$T_{90} < 4.5$ seconds, $T_{95} < 6.5$ seconds (for methane, including weather protection)
Operational and certified		-40°C to $+65^{\circ}\text{C}$ temperature range
Drift with time and over temperature range		-40°C to $+65^{\circ}\text{C}$ Baseline $\pm 2\%$ LEL 50% FSD $\pm 4\%$ LEL
Drift with pressure		0.1% (of reading) per mbar
Power supply		18-32V (24V nom) DC, $< 4.5\text{W}$ max
Environmental protection		IP66/67
Diagnostics (and re-calibration)		Via certified Hand Held Interrogator
Safety approvals		CENELEC (BASEEFA), SAA II 2G EEx d IIC T5 (Tamb -40°C to $+55^{\circ}\text{C}$) T4 (Tamb -40°C to $+65^{\circ}\text{C}$) UL/CSA Class 1, Div 1, Groups B, C + D (-40°C to $+65^{\circ}\text{C}$) FTZU, BKI, GÖSST
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. For other gases and vapors contact your local distributor.
Standard Calibrations		Methane 100%LEL, Ethane 100%LEL, Propane 100%LEL, Butane 100%LEL, Ethylene/Ethane 100%LEL ¹ , 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) ¹ .
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 ¹ , Styrene 100%LEL ¹ , 1,3 Butadiene 100%LEL ¹ .

Note: ¹ Only available on Ethylene version Searchpoint Optima Plus.

Issue 6 01/2004
DS0274 2108M0503

zenter
customer business centre

ZENTER EUROPE
Wilstrasse 11-U11
CH-8610 Uster
Switzerland
Tel: +41 (0)1 943 4300
Fax: +41 (0)1 943 4398
sales@zelana.co.uk

zenter
customer business center

ZENTER AMERICAS
Zellweger Analytics Distribution, Inc.
400 Sawgrass Corporate Pkwy.
Suite 100
Sunrise, FL 33325
Tel: +1 954 514 2700
Toll free: +1 800 538 0363
Fax: +1 954 514 2784
sales@zelana.com

SWITZERLAND - HEADQUARTERS
Tel: +41 (0)1 943 22 11
Email: info@zelana.com

ASIA PACIFIC
Tel: +65 6862 7701
Email: za.ap@zelana.com

BELGIUM
Tel: +32 (0) 70 223 024
Email: za.be@zelana.com

FRANCE
Tel: +33 (0) 810 20 41 11
Email: za.fr@zelana.com

GERMANY
Tel: +49 (0) 89 791 920
Email: za.de@zelana.com

ITALY
Tel: +39 0248 3391
Email: za.it@zelana.com

MIDDLE EAST
Tel: +971 4 3458 338
Email: za.me@zelana.com

NETHERLANDS
Tel: +31 (0) 35 543 56 46
Email: za.nl@zelana.com

SPAIN
Tel: +34 93 379 9611
Email: za.es@zelana.com

UK
Tel: +44 (0) 1202 676161
Email: za.uk@zelana.com

www.zelana.com

www.lumidor.com

Please Note:

While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines.

z **zellweger analytics**
A Division of the Zellweger Luwa Group

Afriso Ema AB
040-92 20 50
www.afriso.se

