

Sieger Searchline Excel SPECIFICATIONS



Specification	
Available Gases:	Methane, Ethane, Propane, Butane, Pentane, Ethylene, Propylene, Ethanol, Methanol.
Range:	0 to 5 LEL.m.
Recommended Alarm Settings:	(Low) 1.0 LEL.m; (high) 3.0 LEL.m.
Path Lengths:	Short Range 5 to 40m (15 to 130 ft.), Medium Range 40 to 120m (130 to 390ft.) and Long Range 120 to 200m (390 to 650ft.)
Speed of Response:	T90 less than 3 seconds. (under normal operating conditions).
Output Signal:	4 to 20mA (maximum loop resistance 600 ohms; source & sink available) and RS485. 21mA Over range. 4 to 20mA Normal operation (0 to 5 LELm). 3mA ⁽¹⁾ Dirty optics. 2.5mA ⁽¹⁾ Beam blocked. 2mA ⁽¹⁾ Inhibit. 0mA Fault.
Digital Output:	Modbus RS485 multi drop. Using DVC100(m) or DX100(m).
Operating Temperature:	-40 to +65°C (-40 to 150°F).
Operating Humidity:	0 to 99% RH (non-condensing).
Operating Pressure:	91.5 to 105.5 KPa (915 to 1055 mbar) (non-compensated).
Warm-up Time:	Less than 5 minutes (operational), or less than 1 hour (fully stabilised).
Power Supply:	18V to 32V dc.
Power Consumption:	Short Range TX: 3.5 / 5.0*W maximum. Medium and Long Range TX: 5.5 / 7.5*W maximum. RX: 8W maximum.
Enclosure Material:	316 stainless steel.
Weight (inc. mounting bracket)	Short Range TX: 3.5kg. Medium and Long Range TX: 7kg. RX: 3.5kg.
Vibration:	2 to 60Hz, max ptp amplitude 1mm.
Misalignment Tolerance:	Short Range ±0.5° (±~35cm at 40m). Medium Range ±0.5° (±~104cm at 120m). Long Range ±0.5° (±~170cm @ 200m).
EMC Standards:	EN50270:1999
Performance Approval:	FM performance approved.
Safety Approval:	ATEX: EExd IIC T5(-40°C to +65°C). EExd IIC T6(-40°C to +40°C). □ II 2G. UL: Class 1 Div 1 Groups B,C + D and Class 1 Zone 1 AEx d IIB + H2 (Tamb -40°C to +65°C). CSA: Class 1 Div 1 Groups B,C + D, T5 and Exd IIC T5 (Tamb -40°C to +65°C). FM: Class 1 Div 1 Groups B,C and D Other: SAA, GOST. Independently assessed to IEC61508
I.P. Rating:	IP66 and IP67.
	(1) User programmable.
	* Turboheating activated (standard feature; user selectable). This is recommended for the most severe weather conditions

Specification	
Available Gas Calibrations:	Methane*
Detection Range:	0-100% LEL
Minimum Alarm Thresholds:	20% LEL (>0.5 to 2.5m duct width) 10% LEL (>2.5m to 5m duct width)
Speed of Response:	T90 < 1 second
Output Signals	Measuring range: 4-20mA sink or source (Default current source) Over range: 21mA Warning: 3mA Beam Block: 2.5mA Inhibit: 2mA Fault: 0mA
Diagnostics:	RS 485 serial link
Digital Output:	Modbus RS485 multi drop. (Using DVC100(m) or DX100(m)).
Operating Temperature:	-40 to +65°C (-40 to 150°F) ambient. Contact Honeywell Analytics for high temperature applications.
Operating Humidity:	0-99% (non condensing)
Operating Pressure:	91.5 - 105.5 kPa (non compensated)
Repeatability:	5.0% LEL (<1 metre duct width) 2.5% LEL (>1 metre duct width)
Warm-up Time:	<1 hour (fully stabilised)
Power Supply:	18 to 32V DC
Power Consumption:	Unit: 13W max. Heated Reflector Panel: 6W (nom) @ 24Vdc
Enclosure Material:	316 Stainless steel
IP Rating:	IP66 and IP 67
Weight:	Transceiver 13kg, reflector panel 2.0kg (>0.5 to 2.5m duct width), 4kg (>2.5 to 5.0m duct width)
Vibration:	2-60 Hz, max ptp amplitude 1mm
EMC Standards:	EN50270:1999
Performance Approval:	FM performance approved
Safety Approvals:	ATEX: II 2 G EExd IIC T5 (-40 to +65°C). EExd IIC T6 (-40 to +40°C) Heated Panel: EExd IIC T4 (-40 to +60°C) UL: Class 1, Div 1, Groups B, C and D Class 1, Zone 1, AEx d IIB + Hydrogen (Amb -40°C to +65°C)

 $^{^{\}star}\text{Contact}$ Honeywell Analytics for other gases and approvals