

## Sensepoint XCD

### Flammable, toxic and oxygen gas detector for industrial applications



General Specifications											
<b>Use</b>	3 wire, 4-20mA and RS485 MODBUS* output fixed point detector with in-built alarm and fault relays for the protection of personnel and plant from flammable, toxic and Oxygen hazards. Incorporating a transmitter with local display and fully configurable via non-intrusive magnetic switch interface. Wide range of local and remote sensors available.										
Electrical											
	Input Voltage Range	16 to 32VDC (24VDC nominal)									
	Max Power Consumption	Maximum power consumption is dependent on the type of gas sensor being used. Electrochemical cells = 3.7W, IR = 3.7W and catalytic = 4.9W. Maximum inrush current = 800mA at 24VDC									
	Current Output	Sink or source									
	Relays	3 x 5A@250VAC. Selectable normally open or normally closed (switch) and energized/de-energised (programmable) Alarm relays default normally open/de-energized. Fault relay default normally open/energized									
	Communication	RS485, MODBUS RTU (Pending)									
Construction											
<b>Material</b>	Housing	Epoxy painted aluminium alloy ADC12 or 316 stainless steel									
	Sensor	316 stainless steel									
<b>Weight (approx)</b>	Aluminium Alloy ADC12	2.0kg (4.4lbs)									
	316 Stainless Steel	5.0kg (11lbs)									
<b>Mounting</b>	Integral mounting plate with 4 x mounting holes suitable for M8 bolts. Optional pipe mounting kit for horizontal or vertical pipe Ø1.5 to 3" (2" nominal)										
<b>Cable Entries</b>	ATEX/IECEX versions: 2 x M20 cable entries; UL/cUL versions: 2 x ¾"NPT conduit entries. Suitable blanking plug supplied for use if only 1 entry used. Seal to maintain IP rating										
Environmental											
<b>IP Rating</b>	IP66 in accordance with EN60529:1992										
<b>Certified Temperature Range</b>	40°F to +149°F (-40°C to +65°C) Note: The detector display may become illegible at temperatures below -20°C, but the detector continues its gas monitoring function. The display is not damaged and recovers when the temperature rises back above -20 °C.										
<b>Operating Humidity</b>	Continuous 20-90%RH (non-condensing), Intermittent 0-99%RH (non-condensing)										
<b>Operating Pressure</b>	90-110kPa										
<b>Storage Conditions</b>	-13°F to 131°F (-25°C to +65°C)										
Detectable Gases and XCD Sensor Performance											
Gas	User Selectable Full Scale Range	Default Range	Steps	User Selectable Cal Gas Range	Default Cal Point	Response Time (T90) Secs	Accuracy	Operating Temperature *		Default Alarm Points A1 A2	
										▲ - Rising Alarm ▼ - Falling Alarm	
<b>Electrochemical Sensors</b>											
Oxygen	25.0%Vol. only	25.0%Vol.	n/a	20.9%Vol. (Fixed)	20.9%Vol.	<30	<+/-0.5%Vol.	-20°C / -4°F	55°C / 131°F	19.5%Vol. ▼	23.5%Vol. ▲
Hydrogen Sulfide	10.0 to 100.0ppm	50.0ppm	1ppm	30 to 70% of selected full scale range	25ppm	<50	<+/-1ppm	-20°C / -4°F	55°C / 131°F	10ppm ▲	20ppm ▲
Carbon Monoxide	100 to 1,000ppm	300ppm	10ppm		100ppm	<30	<+/-6ppm	-20°C / -4°F	55°C / 131°F	30ppm ▲	100ppm ▲
Hydrogen	1,000ppm only	1,000ppm	n/a		500ppm	<65	<+/-25ppm	-20°C / -4°F	55°C / 131°F	200ppm ▲	400ppm ▲
<b>Catalytic Bead Sensors</b>											
Flammable 1 to 8*	20.0 to 100.0%LEL	100%LEL	10%LEL	30 to 70% of selected full scale range	50%LEL	<25	<+/-1.5%LEL	-20°C / -4°F	55°C / 131°F	20%LEL ▲	40%LEL ▲
<b>Infrared Sensors</b>											
Methane	20.0 to 100.0%LEL	100%LEL	10%LEL		50%LEL	<40	<+/-1.5%LEL	-20°C / -4°F	50°C / 122°F	20%LEL ▲	40%LEL ▲
Methane*	20 to 100%Vol.	100%Vol.	10%Vol.		50%Vol.	<40	<+/-1%Vol.	-20°C / -4°F	50°C / 122°F	20%Vol. ▲	40%Vol. ▲
Carbon Dioxide	2%Vol. only	2%Vol.	n/a	1%Vol.	<40	<+/-0.04%Vol.	-20°C / -4°F	50°C / 122°F	0.4%Vol. ▲	0.8%Vol. ▲	
<b>NOTES:</b> Performance data is: 1. Taken at nominal 20°C, 50%RH. 2. Applicable over the range 10 to 90% full scale. 3. Measured on units calibrated at 50% full scale. 4. Accuracy at 10% of default full scale (typical A1 alarm) of applied gas, or minimum (whichever is greater). 5. Measured at 500ml/min for IR, Toxics and O <sub>2</sub> , 1 Ltr/min for Catalytic bead using the calibration cup (S3KCAL). * Extended operating temperature range of -40°C to +65°C (-40°F to +149°F) for all sensors except for IR and H <sub>2</sub> EC sensors, with an accuracy of +/- 30% of applied gas from -20°C to -40°C (-4°F to -40°F) and +55°C to +65°C (+131°F to +149°F). Long term operation at this range may cause decline in sensor performance. Contact Honeywell Analytics for any additional data or details.											
Certification*											
<b>European</b>	ATEX Ex II 2 GD Ex d IIC Gb T6 (Ta -40°C to +65°C) Ex tb IIIC T85°C Db IP66										
<b>International</b>	IEC Ex II 2 GD Ex d IIC Gb T6 (Ta -40°C to +65°C) Ex tb IIIC T85°C Db IP66										
<b>China</b>	GB Ex d IIC T4 GB3836.1&2 -2000, PA, CCCF										
<b>Korea</b>	KTL Ex d IIC T6 (-40C to +65C)										
<b>US, Latin America, Canada</b>	UL – Class I, Division 1, Groups B, C and D, Class I, Division 2, Groups B, C & D, Class II, Division, Groups E, F & G, Class II, Division 2, Groups F & G. (-40°C to +65°C)										
<b>EMC</b>	CE: EN50270:2006 EN6100-6-4:2007										
<b>Performance</b>	ATEX, IEC/EN60079-29-1:2007, EN45544, EN50104, EN50271; China: PA Pattern Measurement (for transmitter and toxic gas sensors) "CCCF" Shenyang for Flammable (fire dept approval); UL508										

\* Contact Honeywell Analytics for availability