14 General specification

Sensepoint XCD Transmitter	
Use	3-wire, 4-20mA, gas detector transmitter for use with directly installed flammable and toxic gas sensors. For the protection of personnel and plant from flammable and toxic gas hazards.
Electrical	
	Input Voltage Range: 16 to 32Vdc (24Vdc nominal) Max Power Consumption: Max 5 Watts. at 24Vdc (see section 2 regarding maximum in rush current) Current output 4-20mA (Source or Sink) ≥0.0<1.0 mA Fault (refer to table 5 section 12.3 for further details). 4.0 mA to 20.0 mA Normal gas measurement 2.0 mA or 4.0 mA (17.4 mA) Inhibit (during configuration/user settings) 22.0 mA Maximum over range Terminals 15 x screw terminals suitable for wire diameter 0.5mm^2 to 2.5mm^2 (20AWG to 13AWG). Relays 3 x 5A@250VAC. Selectable normally open or normally closed (switch) and energized/de-energized (programmable). Communication RS485, Modbus RTU
Construction	
Material	Epoxy painted aluminium alloy or 316 Stainless Steel
Weight	Aluminium alloy: 1.7kg, 316 Stainless Steel: 3.7kg
Mounting	Pole or wall mounting
Entries	2 x M20 (for ATEX/IECEx/AP Approval) or 2x3/4NPT (for UL Approval)

Detectable Gases & Performance (See notes below)

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	
								Min	Max	A1	A2
Electrochemical Sensors											
Oxygen	25.0%V/V only	25.0%V/V	n/a	20.9%V/V (Fixed)	20.9%V/V	<30	<+/-0.5%Vol.	-20°C / -4°F	55°C / 131°F	19.5V/V▼	23.5V/V▲
Hydrogen Sulfide	10.0 to 100.0ppm	50.0ppm	1.0ppm	30 to 70% of selected full scale range	25.0ppm	<50	<+/-1ppm	-20°C / -4°F	55°C / 131°F	10.0ppm▲	20.0ppm▲
Carbon Monoxide	100 to 1,000ppm	300ppm	100ppm		100ppm	<30	<+/-6ppm	-20°C / -4°F	55°C / 131°F	100ppm▲	200ppm▲
Hydrogen	1,000ppm only	1,000ppm	n/a		500ppm	<65	<+/-25ppm	-20°C / -4°F	55°C / 131°F	200ppm▲	400ppm▲
Nitrogen Dioxide	10.0 to 50.0 ppm	10.0 ppm	5.0 ppm		5.0 ppm	<40	+/-3ppm or +/-20%	-20°C / -4°F	55°C / 131°F	5.0 ppm ▲	10.0 ppm▲
Catalytic Bead Sensors				25 to 95 % of selected full scale range							
Flammable 1 to 8*	20 to 100%LEL	100%LEL	10%LEL		50%LEL	<25	<+/-1.5%LEL	-20°C / -4°F	55°C / 131°F	20%LEL▲	40%LEL▲
Infrared Sensors											
Methane	20 to 100%LEL	100%LEL	10%LEL	30 to 70% of selected full scale range	50%LEL	<40	<+/-1.5%LEL	-20°C / -4°F	50°C / 122°F	20%LEL▲	40%LEL▲
Propane	20 to 100%LEL	100%LEL	10%LEL		50%LEL	<40	<+/-1.5%LEL	-20°C / -4°F	50°C / 122°F	20%LEL ▲	40%LEL ▲
Carbon Dioxide	2.00% Vol only	2.00%V/V	n/a		1.00%V/V	<40	<+/-2%Vol.	-20°C / -4°F	50°C / 122°F	0.40%V/V▲	0.80%V/V▲

NOTES ▲ - Rising Alarm ▼ - Falling Alarm

Performance figures are taken at 20~25℃;

1. measured using a sample humidity of 50%RH, applicable between 10 and 90% of full scale,
2. measured using test units calibrated at 50% of full scale,
3. measured at 1000cc/min for Methane CAT, 500cc/min for O_2, Toxic and Methane/Carbon Dioxide IR with calibration cup (S3KCAL).

Response time (T90) may increase when operating in lower or higher temperature conditions or when gas is introduced with the Weather Protection accessory (SPXCDWP) fitted. Methane IR sensor is calibrated and linearised only for Methane. Should it be exposed to other HC then non linear response is expected. For linearised operation other than Methane contact HA for alternate parts. Flammable CAT and Methane IR is calibrated at the factory 50%LEL Methane (2.5%Vol). This calibration enables 100% functional test prior to dispatch. This calibration does not remove need for calibration & test as part of commissioning at site. For gases other than Methane the unit has to be calibrated at site using target gas.Data represents typical values, and system conditioning may be required to achieve stated result. Contact HA for details.

* Extended operating temperature range of -40°C to +65°C (-40°F to +149°F) for all sensor except for IR and H2 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	
China	GB Ex d IIC T4 GB3836.1&2 -2000, PA, (CCCF – Pending)
Korea	KTL Ex d IIC T6 (-40ºC to +65ºC)
US	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. -40ºC to+65ºC
European	ATEX Ex II 2 GD Ex d IIC Gb T6(Ta -40ºC to +65ºC) Ex tb IIIC T85ºC Db IP66
International	IEC Ex II 2 GD Ex d IIC Gb T6(Ta -40ºC to +65ºC) Ex tb IIIC T85ºC Db IP66
CE	EN50270:2006 EN6100-6-4:2007
Environmental	
IP Rating	IP66 in accordance with EN60529:1992
Operating Temperature	-40ºC to +65ºC/ -40ºF to +149ºF, (IR: -20ºC to +50ºC/ -4ºF to +122ºF). *Note: The detector display may become illegible at temperatures below -40°C, but the detector continues its gas monitoring function. The display is not damaged and recovers when the temperature rises back above -20 °C.*
Operating Humidity	Continuous 20-90%RH (non condensing), Intermittent 10-99%RH (non condensing)
Operating Pressure	90-110kPa
Storage Conditions	-25°C to +65°C (-13°F to +149°F)