Critical Environment Technologies™

ANALOG OR DIGITAL GAS DETECTORS DATASHEET

AST-I Industrial Infrared Transmitters



The AST-I series of analog transmitters are high quality, industrial, dual beam, referenced transmitters with miniature infrared sensors, analog output and water / dust tight, corrosion resistant, non-metallic enclosures.

The ${\bf AST\text{-}ICD}$ detects carbon dioxide (CO $_2$) with a choice of one of three different ranges.

The AST-IHC detects hydrocarbons, methane (CH₄) and jet fuel vapours.

Care should be taken to not spray the sensor head. The sensor vent opening has a microporous PTFE filter attached which provides splash protection only, it is not designed to provide protection from the application of pressurized water.

KEY FEATURES

- » Low power consumption
- » Dual temperature compensated pyroelectric infrared detectors
- » Fast response with accurate low-level gas detection
- » Long sensor life
- » Water / dust tight / corrosion resistant polycarbonate enclosure
- » Linear analog (4 20 mA) output
- » Target gases include Carbon Dioxide (CO₂), Hydrocarbons (including Methane)
- » RoHS compliant circuit boards

APPLICATIONS

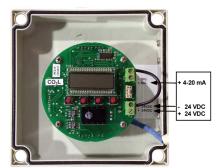
- » Commercial Buildings
- » Institutional Buildings
- » Waste Water Treatment Plants
- » Oil & Gas Plants
- » Manufacturing Plants
- » ... and many more

TECHNICAL DRAWING





WIRING





ANALOG OR DIGITAL GAS DETECTORS DATASHEET

AST-I Industrial Infrared Transmitters

TECHNICAL SPECIFICATIONS		
GAS TYPE		
Infrared	Carbon Dioxide (CO ₂), Hydrocarbons (CH ₄)	
MECHANICAL		
Enclosure	Water/dust tight, NEMA 4, IP66, corrosion resistant ABS with hinged, secure door, copper coated interior to reduce RF interference	
Weight	244 g (8.6 oz)	
Size	165 mm x 156 mm x 92 mm (W x H D) 6.5" x 6.125" x 3.625"	
USER INTERFACE		
Display	4 digit, 7 segment LCD	
INPUT/OUTPUT		
Output	Linear 4 - 20 mA analog (10 bit resolution with current limit)	
ELECTRICAL		
Power Requirement	24 VDC nominal (12 - 30 VDC) (polarity protected) 5 W maximum	
Current Draw	70 - 100 mA	
Fuse	500 mA anti-surge in-line fuse for supplied power	
ENVIRONMENTAL (ser	ssor dependant)	
Operating Temperature	-20°C to 50°C (-4°F to 122°F)	
Humidity	0 - 95% RH non-condensing	

PRODUCT	CODES
Internal Infrared	Sensor
AST-ICD-BW	CO ₂ sensor (0 - 5% volume)
AST-ICD-CW	CO ₂ sensor (0 - 100% volume)
AST-ICD-DW	CO ₂ sensor (0 - 20% volume)
AST-IHC-BW	CH ₄ sensor (0 - 100% LEL)
AST-IHC-CW	CH ₄ sensor (0 - 100% volume)
OPTION (To be add	led at the end of the "Part Number" above.)
PUM-4-N	Splash Guard, factory installed
ACCESSORIES	
CET-715A-CK1	Calibration Kit for 17, 34, 58, 74, 103 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder
SCS-8000-RSG	Metal protective guard, small, 16 gauge, galvanized metal guards for transmitters



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