Critical Environment Technologies™

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 **AST-ICD** detects carbon dioxide (CO_2) with a choice of one of three different ranges.

The **AST-IHC** detects hydrocarbons, methane (CH_4) 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 (CO_2), Hydrocarbons (including Methane)
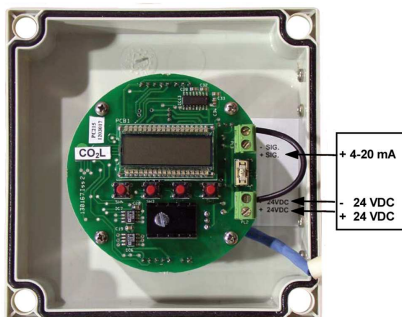» RoHS compliant circuit boards

APPLICATIONS

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

TECHNICAL DRAWING

6.125" (155 mm)

6.5" (165 mm)

3.625" (92 mm)

WIRING

- SIG.
+ SIG.

- 24VDC
+ 24VDC

+ 4-20 mA

- 24 VDC
+ 24 VDC

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 *(sensor 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)

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