

Transmitters - GAS DETECTION 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 **AST-ICD** detects carbon dioxide (CO₂) 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

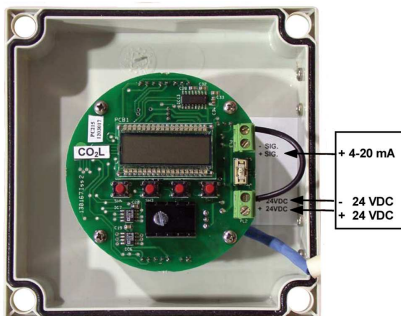
APPLICATIONS

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

TECHNICAL DRAWING



WIRING



AST-I Industrial Infrared Transmitters

TECHNICAL SPECIFICATIONS

GAS TYPE

Infrared Carbon Dioxide (CO₂), Hydrocarbons (CH₄)

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 dependent)

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 CO₂ sensor (0 - 5% volume)

AST-ICD-CW CO₂ sensor (0 - 100% volume)

AST-ICD-DW CO₂ sensor (0 - 20% volume)

AST-IHC-BW CH₄ sensor (0 - 100% LEL)

AST-IHC-CW CH₄ 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

