



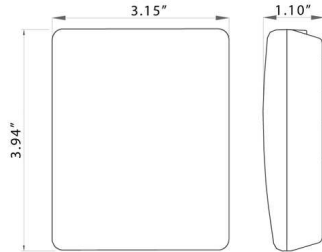
ANALOG GAS DETECTORS DATASHEET

AST-IS Standard CO₂ Transmitter



TECHNICAL DRAWING

AST-IS1 (measurements are in inches)



The AST-IS standard transmitters contain a non-dispersive, infrared sensor for accurate and reliable, indoor, carbon dioxide (CO₂) detection and are available in 3 models with different options. All models are low maintenance and a key component for climate control of buildings and other processes.

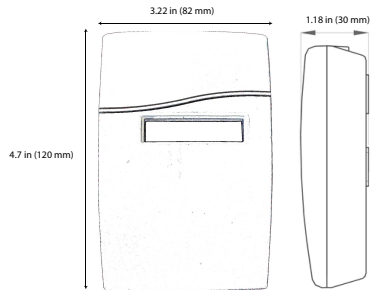
AST-IS1 is a simple, low-cost, transmitter without a display for fixed installation in the climate zone.

AST-IS5 measures both CO₂ and temperature in the ambient air, has a display and can transmit data to a BAS system or controller.

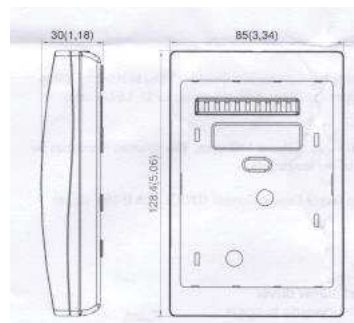
AST-IS14 features a display and has an alarm with sound and light that alerts when the levels of CO₂ exceed defined levels.

The AST-IS standard transmitters feature 4 - 20 mA or 0 - 10 VDC linear output signals, low 24 VDC / VAC nominal voltage, standard 0 - 2,000 ppm range and CE certification.

AST-IS5



AST-IS14 (measurements are in mm and inches)



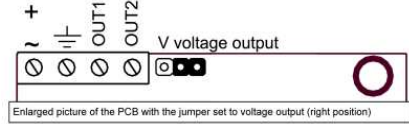
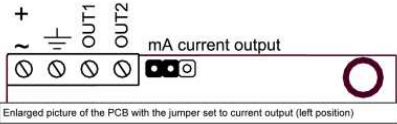
KEY FEATURES

- » 4 - 20 mA or 0 - 10 VDC linear output signal
- » Operating power 24 VDC or 24 VAC nominal
- » Low maintenance, easy calibration
- » 0 - 2,000 ppm standard range
- » Relay output (AST-IS5 model only)
- » 1 LEED credit (AST-IS14 model only)
- » Attractive PVC enclosures ideal for indoor use
- » RoHS compliant circuit boards
- » CE certified

APPLICATIONS

- » Residential Buildings
- » Commercial Buildings
- » Schools / Educational Institutions
- » Offices
- » ... and many more

WIRING



TECHNICAL SPECIFICATIONS

GAS TYPE

Carbon Dioxide (CO₂)

MECHANICAL

AST-IS1 Enclosure General purpose PVC, IP30 rated

Size 3.94" x 3.15" x 1.1"
(100 mm x 80 mm x 28 mm)

AST-IS5 Enclosure General purpose PVC, IP30 rated

Size 4.7" x 3.2" x 1.2"
(120 mm x 82 mm x 30 mm)

AST-IS14 Enclosure General purpose PVC, IP30 rated

Size 5.11" x 3.34" x 1.18"
(130 mm x 85 mm x 30 mm)

ELECTRICAL

Power Requirement 24 VDC or VAC

Linear Outputs Linear 4 - 20 mA or 0 - 10 VDC signal

Relay Output 1 SPST isolated N.O. dry contact relay rated
(AST-IS5 only) for 1mA @ 5V up to 1A @ 50 VAC or 24VDC

SENSOR

Infrared CO₂ Sensor

Sampling Method Non-dispersive infrared

Monitoring Method Diffusion

Range 0 - 2,000 ppm

0 - 4% volume (AST-IS18 only)

Temperature Sensor Range (AST-IS5 only) 0°C to 50°C (32°F to 122°F)

Accuracy ± 30 ppm, ± 3% of reading

ENVIRONMENTAL

Operating Temperature 0°C to 50°C (32°F to 122°F)

Humidity 0 - 95% RH non-condensing

CERTIFICATION

CE and compliance with ISO 9001:2008

PRODUCT CODES

Carbon dioxide (CO₂), office wall mount **AST-IS1**

Carbon dioxide (CO₂), wall mount with LCD digital display, temperature sensor & relay **AST-IS5**

Carbon dioxide (CO₂), wall mount with LCD digital display, visual/audible alarm, mute button & 1 LEED Credit **AST-IS14**

ACCESSORIES

Metal protective guard, small, 16 gauge, galvanized metal guards for transmitters **SCS-8000-RSG**

