

# Transmitters - GAS DETECTION DATASHEET AST-IS Industrial CO<sub>2</sub> Transmitter





The AST-IS Industrial Transmitters contain a non-dispersive, infrared sensor for accurate and reliable carbon dioxide (CO<sub>2</sub>) detection and are available in 3models with different options. All models are maintenance free and a key component for climate control of buildings and other processes.

AST-IS3 is a duct mount, IP54 rated enclosure for installation in the ventilation duct.

AST-IS6 is a wall mount enclosure with protection class IP65, includes a display and is ideal for most large spaces.

AST-IS18 is a wall mount, IP65 rated enclosure that is specially coated PCB with an extra dust/water protection filter suited for greenhouses, wineries and similar environments. Includes a temperature sensor, relay and a display.

The AST-IS transmitters feature 4 - 20 mA or 0 - 10 VDC linear output signals, low 24 VDC / VAC nominal voltage, standard 0 - 2,000 ppm range (0 - 4% volume measurement range available for winery applications) and are CE certified.

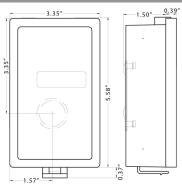
#### **KEY FEATURES**

- » Operating power 24 VDC or 24 VAC nominal
- » 4 20 mA or 0 10 VDC linear output signal
- » Relay output (AST-IS18 only)
- » Single internal infrared CO, sensor
- » LCD digital display (AST-IS6 and AST-IS18 only)
- » 0 2,000 ppm standard range
- » 0 4% volume measurement range (AST-IS18 for winery applications)
- » Maintenance free, lifetime calibration
- » RoHS compliant circuit boards
- » CE certified

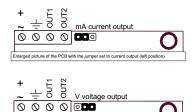
# **APPLICATIONS**

- » Residential Buildings
- » Commercial Buildings
- » Greenhouses
- » Schools / Educational Institutions
- » Wineries
- » Office Buildings
- » ... and many more

### **TECHNICAL DRAWING**



### WIRING



Enlarged picture of the PCB with the jumper set to voltage output (right position)



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# **TECHNICAL SPECIFICATIONS**

#### GAS TYPE

Carbon Dioxide (CO<sub>2</sub>)

#### MECHANICAL

AST-IS3 Enclosure	Industrial Housing PVC, IP54 rated	
Size	5.98″ x 3.34″ x 1.85″ (152 mm x 85 mm x 47 mm)	
AST-IS6 Enclosure	Industrial Housing PVC, IP65 rated	
Size	5.98″ x 3.34″ x 1.85″ (152 mm x 85 mm x 47 mm)	
AST-IS18 Enclosure	Industrial Housing PVC, IP65 rated	
Size	5.59" x 3.3" x 1.81" (142 mm x 84 mm x 46 mm)	

#### ELECTRICAL

Power Requirement	24 VDC or VAC
Linear Outputs	Linear 4 - 20 mA or 0 - 10 VDC signal
Relay Output (AST-IS18 only)	1 mA / 5V up to 1A / 50 VAC / 24 VDC

#### SENSORS

Non-dispersive infrared	
Diffusion	
0 - 2,000 ppm	
0 - 4% volume (AST-IS18 only)	
$\pm$ 30 ppm, $\pm$ 3% of reading	
0°C to 50°C (32°F to 122°F) range	

#### 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 (CO <sub>2</sub> ), duct mount with mounting kit, IP54 industrial enclosure, no display	AST-IS3
Carbon dioxide (CO <sub>2</sub> ), wall mount with bracket, IP65 industrial enclosure, LCD digital display	AST-IS6
Carbon dioxide (CO <sub>2</sub> ), wall mount with bracket, IP65 industrial enclosure, LCD digital display, relay, temperature sensor, 0 - 4% volume measurement range	AST-IS18
ACCESSORIES	
Calibration kit for 17 - 103 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder	CET-715A-CK1

Metal protective guard, small galvanized metal guards for t	SCS-8000-RSG



CE



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