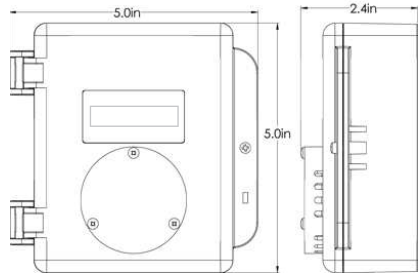


ESH-A Remote Sensor



TECHNICAL DRAWING



Note: Drawings above are shown with an optional splash guard. Without splash guard, thickness of unit is 2.1" (53 mm).

The ESH-A Remote Sensor offers flexible location monitoring of combustible, refrigerant or TVOC gases in non-hazardous, non-explosion rated, commercial and light industrial applications. It communicates with a controller or transmitter using current loop into a 100 ohm load or a voltage signal of 0.40 to 2 volts. It can be located at a maximum distance of 200 meters from the controller or transmitter.

The ESH-A Remote Sensor comes in a standard water / dust tight, corrosion resistant ABS / polycarbonate enclosure with a hinged, secure door and is designed to protect the sensor and provide easy mounting components. An optional splash guard may be installed to further protect the remote sensor in water spray or washdown applications.

The mounting height of the ESH-A Remote Sensor depends on the gas being monitored. A gas that is heavier than air should be detected 6 inches from the floor and a gas that is lighter should be detected on or near the ceiling. A gas that has the same density as air should be detected in the "breathing zone", where most human breathing takes place, which is 1 to 2 m (4 to 6 ft) from the floor.

KEY FEATURES

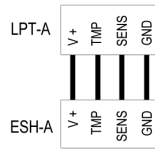
- » Allows remote location monitoring of combustible, refrigerant or TVOC gases.
- » Current or voltage output signal
- » Communicates with CETCI's controllers and transmitters
- » Easy to install and maintain
- » Standard water / dust tight, corrosion resistant enclosure (drip proof); IP54 rated with optional splash guard installed. Keeps sensor dry, clean and protected.

APPLICATIONS

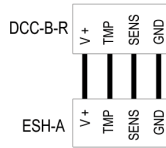
- » Parking Garages
- » Equipment/ Machinery Rooms
- » Manufacturing Plants
- » Food Processing Plants
- » Refrigeration Plants
- » Power Generation Plants
- » Airport Maintenance Hangers
- » ... and many more

WIRING

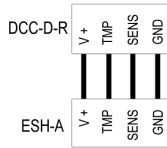
ESH-A wiring to LPT-A



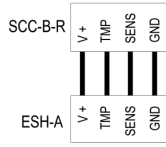
ESH-A wiring to DCC-B-R



ESH-A wiring to DCC-D-R



ESH-A wiring to SCC-B-R





ESH-A Remote Sensor

REMOTE & PERIPHERAL DEVICES

TECHNICAL SPECIFICATIONS

GAS TYPE

Combustible (catalytic), Jet Fuel (infrared), Refrigerants (solid state), TVOCs (solid state or PID)

MECHANICAL

Enclosure	ABS / Polycarbonate, IP54 rated optional splash guard installed. Copper coated interior to reduce RF interference.
Weight	340 g (12 oz)
Size	5.0" x 5.0" x 2.1" (127 mm x 127 mm x 53mm)

ENVIRONMENTAL

Operating Temperature	-20°C to 40°C (-4°F to 104°F)
Humidity	15 - 90% RH non-condensing

ELECTRICAL

Power Requirements	12-24 VDC, 1W, Class 2
Output	current or voltage

REMOTE SENSOR MOUNTING HEIGHTS

On or near the ceiling	Hydrogen (H ₂), Methane (CH ₄) TVOC (target gas dependant)
6 inches above floor	Propane (C ₃ H ₈), Refrigerants TVOC (target gas dependant)

COMPATIBLE CETCI PRODUCTS

Transmitters	LPT-A Analog (single channel)
	LPT-P Car Park Digital (1, 2, or 3 channel)
	LPT-M Modbus® (1, 2, or 3 channel)
	LPT-B BACnet® (1, 2, or 3 channel)
Controllers	SCC Self Contained (single or dual channel)
	DCC Dual Channel (single or dual channel)

PRODUCT CODES

<i>ESH-A- Remote Catalytic Sensors</i>		<i>Lifespan</i>
ESH-A-CH2-100	Hydrogen (H ₂) sensor (0 - 100% LEL)	5 yrs
ESH-A-CCH4-100	Methane (CH ₄) sensor (0 - 100% LEL)	5 yrs
ESH-A-CC3H8-100	Propane (C ₃ H ₈) sensor (0 - 100% LEL)	5 yrs

<i>ESH-A- Remote Solid State Sensors</i>		<i>Lifespan</i>
ESH-A-SR22	Refrigerants (R22) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR134A	Refrigerants (R134A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR402A	Refrigerants (R402A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR404A	Refrigerants (R404A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR407C	Refrigerants (R407C) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR410A	Refrigerants (R410A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR422D	Refrigerants (R422D) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR438A	Refrigerants (R438A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR507A	Refrigerants (R507A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-STVOC	TVOCs sensor (0 - 500 ppm)	5 yrs

<i>ESH-A- Remote Jet Fuel (Infrared) Sensor</i>		<i>Lifespan</i>
ESH-A-JET	Propane (C ₃ H ₈) sensor (0 - 100% LEL)	8 yrs

<i>ESH-A Remote TVOCs (PID) Sensors</i>		<i>Lifespan</i>
ESH-A-SPL	TVOC PID sensor (0 - 30 ppm)	**
ESH-A-SPH	TVOC PID sensor (0 - 300 ppm)	**

*** usage and application dependant*

OPTIONS (Factory installed) Add at the end of the "Part Number" above.

S	Splash Guard
----------	--------------

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
PID-KITA	Maintenance kit for cleaning PID sensor bulb
SCS-8000-RSG	Metal protective guard, small, 16 gauge, galvanized metal guards for transmitters and/or ESH-A Remote Transmitter, as required.

CERTIFICATION

Conforms to: CSA-C22.2 No. 205-12, UL508 (Edition 17):2007

Conforms to: EMC Directive 2004/108/EC,
EN 50270:2006, Type 1, EN61010

Conforms to: FCC. This device complies with Part 15 of the FCC Rules.



BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). Modbus® is a registered trademark of Gould Inc. Corporation.