ESH-A Remote Sensor

Critical Environment Technologies™

FIXED SYSTEMS

The ESH-A Remote Sensor offers flexible location monitoring of combustible or PID 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.
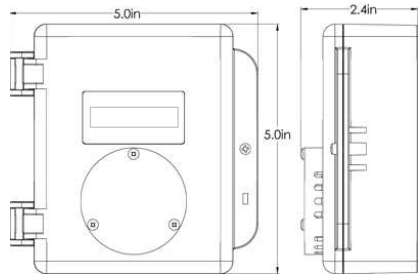
KEY FEATURES

» Allows remote location monitoring of combustible or PID TVOC gases.
» Current or voltage output signal
» Communicates with CETCI's controllers and transmitters
» Easy to 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
» Power Generation Plants
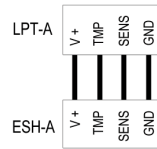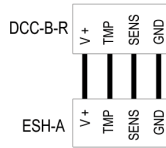» Airport Maintenance Hangers
» ... and many more

TECHNICAL DRAWING

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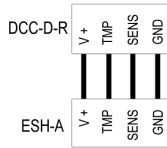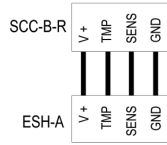
WIRING

ESH-A Remote Sensor

TECHNICAL SPECIFICATIONS

GAS TYPE

Combustible (catalytic), Jet Fuel (infrared), TVOC (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_3H_8) 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

ESH-A- Remote Catalytic Sensors		Lifespan
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_3H_8) sensor (0 - 100% LEL)	5 yrs

ESH-A- Remote Jet Fuel (Infrared) Sensor		Lifespan
ESH-A-JET	Propane (C_3H_8) sensor (0 - 100% LEL)	8 yrs

ESH-A Remote TVOCs (PID) Sensors		Lifespan
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.

H	Internal heater for cold environment applications down to -40°C / 40°F
S	Splash Guard

ACCESSORIES

CET-SGC	Calibration clip for splash guard
CET-715A-CK1	Calibration Kit for 17, 34, 58, 74, 100 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	Small galvanized metal, 16 gauge protective guard

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.