



## Model IR-622

Non-dispersive Infrared Optical Combustible Gas Sensor



### Description

Model IR-622 sensors are non-intrusive "Smart" sensors designed to detect and monitor Combustible Hydrocarbons over the range of 0-100% LEL (lower explosive limit). The sensor assembly consists of a miniature infrared optical sensor in a stainless steel housing that includes a splashguard with integral cal port, a plug-in control transmitter circuit, a base connector board and an explosion proof enclosure.

### Features

- cCSAus approved: Class I, Division 1, Groups B, C, & D
- Compatible with PLCs, SCADA, DCS, via 4-20 mA, and/or RS-485, and/or alarm relays
- Sensor status and parameters accessible via RS-485 (Modbus™)
- Menu programmable relays standard (two alarms plus fault)
- Simple menu driven calibration - takes less than 3 minutes
- Backlit LCD and LED indicators for FAULT and CAL status • Unique miniature field-replaceable optical sensor
- Plug-in field-replaceable transmitter
- Low power consumption
- 5-year expected sensor life



# Model IR-622

## Combustible Gas Sensor

### System Specifications

#### Sensor Type

Non-dispersive Infrared Optical (NDIR)

#### Measurement Range

0-100% (lower explosive limit) LEL

#### Accuracy/Repeatability

±3% full scale 0-50% LEL

±5% full scale 50-100% LEL

#### Response/Clearing Time

T90 <30 seconds

#### Zero Drift

<5% per year

#### Ambient Operating Temperature Range

-40°C to +40°C; -40°F to 104°F (CANADA)

-25°C to +40°C; -13°F to 104°F (USA)

#### Operating Humidity Range

0-99% RH non-condensing

#### Outputs

Linear 4-20 mA DC

RS-485 Modbus™

3 Relays (alarm 1, alarm 2, & fault)

Contacts rated 5 amps

#### Input Voltage

22.5-28 VDC

#### Power Consumption

<3 watts @ 24 VDC

#### Electrical Classification

Explosion proof

Class I, Division 1, Groups B, C, D

#### Ingress Protection

NEMA 4X, IP66

#### Safety Approvals

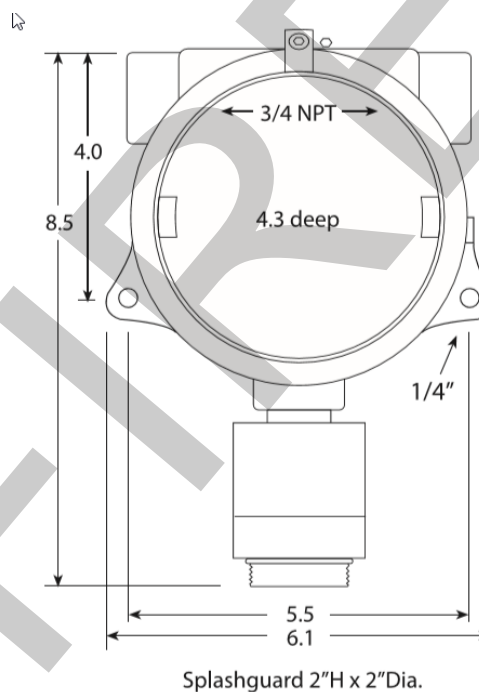
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#### Sensor Life/Warranty

Sensor: 5 year warranty pro-rated

Transmitter: 2 year warranty

### Dimensions



### Order Guide

PN 966-224520-100 Model IR-622 in Aluminum Junction Box

PN 966-22452B-100 Model IR-622-316SS in Stainless Steel Junction Box

*Teledyne Gas & Flame Detection quality assurance programmes demand the continuous assessment and improvement of all our products. Information in this leaflet could thus change without notification and does not constitute a product specification. For more information, please contact us or your company representative*



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