

EDN/IR TRANSMITTER/IR SENSOR



The EDN/IR series of transmitters use the very reliable NDIR (Non dispersive Infrared) sensor technology to monitor the presence of carbon dioxide, methane or propane (depending on model).

The Infrared sensor is SIL2 approved and has a wide operating temperature and humidity range.

This technique is based upon the fact that gas has a well defined light absorption curve in the infrared spectrum that can be used to identify and detect specific gases.

The EDN/IR is equipped with electronics and firmware that provide linearised and temperature compensated analogue output in the industry standard 4-20mA output format.



SPECIFICATIONS & APPROVALS

APPROVED BY SIL:

SIL Cert No:
C-15-192972-01 (sensor only)

OPERATING TEMPERATURE RANGE:

-40 to +60°C (Sensor)
-0 to +60°C (Transmitter)

OPERATING HUMIDITY RANGE:

0 - 95% Rh Non-condensing

GAS TYPES: Carbon dioxide, Methane & Propane

EDN/IR 1 Propane: 0-100% LEL

EDN/IR 2 Methane: 0-100% LEL

EDN/IR 3 Carbon dioxide: 0-5000ppm
0-1% Vol
0-2% Vol
0-3% Vol

EDN/IR 4 R134A : 0-2000ppm

ACCURACY (AT 25°C):

+/- 1% of FS range for readings below 25% of range
+/- 2% of FS range for readings below 50% of range
+/- 5% of FS range for readings above 50% of range

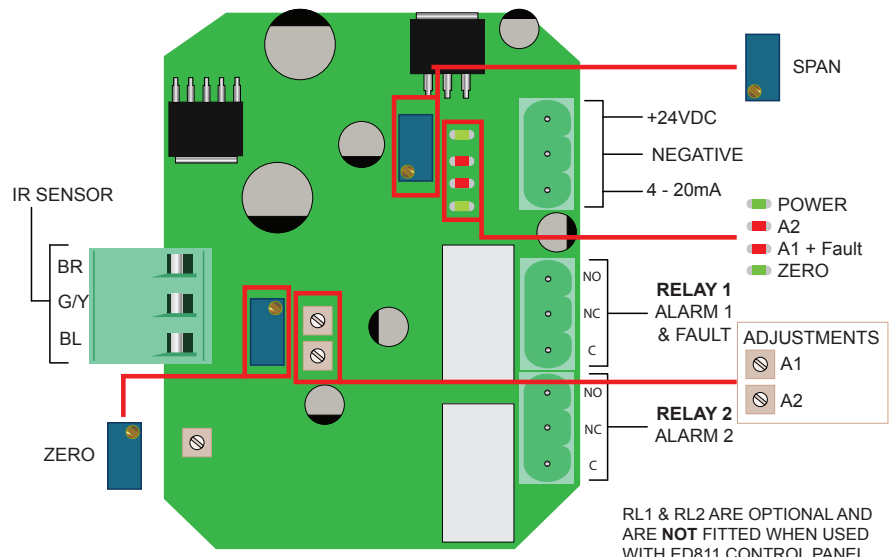
RESPONSE TIME T90: < 60seconds

POWER INPUT VOLTAGE: 15 - 30VDC
POWER INPUT CURRENT: 120mA

WARM UP TIME (AT 25°C):

60 seconds for full operation
> 15 minutes for full specification

CONNECTIONS DIAGRAM



OUTPUTS

Relay contacts: 30V Max (AC or DC)
1A max (Non Inductive)

1 LOOP OUTPUT

4-20mA
500ohm max load

OPTIONAL EQUIPMENT

A splash protector can be added to improve the longevity of the sensor when used outside.

A calibration kit can be supplied to allow the sensor to be maintained or tested by on site engineers.