

# GAS DETECTOR TYPE ED910

## Features

- Industry standard 4-20mA input
- Double level alarms
- Continuous meter read out
- Fault monitoring of sensor wiring
- Engineer's override
- Analogue output
- LCD Digital Display

Semiconductor, Pellistor (Catalytic) and Electrochemical Sensor types are all available complete with the necessary head electronics. Supplied certified Flameproof or suitable for Safe Area only, covering a wide range of gases and applications. The ED910 Gas Detector provides an economic and very reliable solution to flammable and toxic gas detection.

## FACILITIES ARE

1. Continuous meter readout of gas concentration
2. Two alarms each with two sets of voltage free contacts rated 3A @ 250Vac (resistive load).
3. Two sets of non alarm accept voltage free contacts rated 3A @ 250Vac (resistive load) factory selectable between low and high gas alarm.
4. Fault warning with two sets of voltage free contacts rated 3A @ 250Vac (resistive load).

## HAZARDOUS AREA

Where a particular installation is classified as "Hazardous" by the Health and Safety Executive, Department of Transport etc, consideration should be given to the possibility of fitting Hazardous Area Certified sensors. If full Marine Approval is required, the ED810 or ED700 Gas Detectors manufactured by Electronic Devices Ltd should be considered.

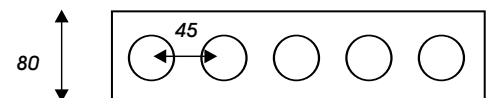
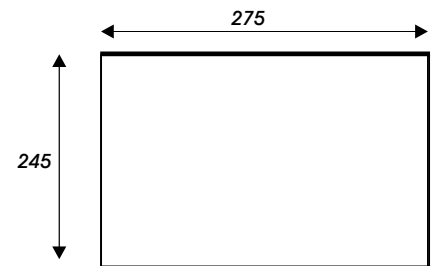


## SPECIFICATION

1. Power input 24V D.C.  
110/220/240V A.C. 50/60 Hz.  
(notify in order)
2. System Power consumption in non alarm condition typically less than 10W dependent upon sensor type.
4. Ambient temperature range -25C to +55C
5. Alarm point accuracy + or - 5% of F.S.D

## DIMENSIONS

(All dimensions in mm)



## Approved By:



Sensors can be BASEEFA Certified Flameproof or Intrinsically Safe Where applicable.



Certificate No. M0344

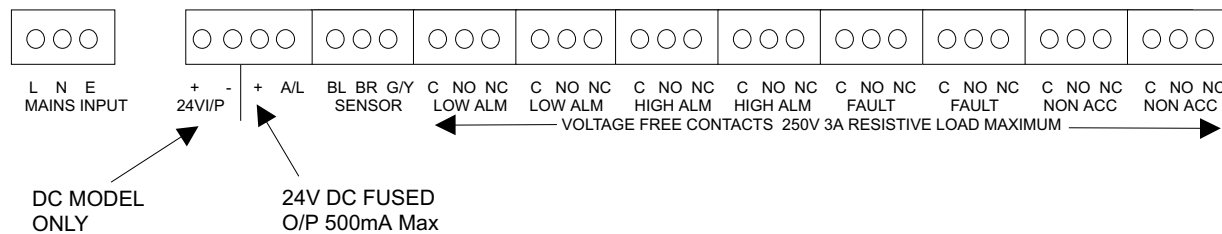
Quality Assurance to BASEEFA (HSE) Regulations Certificate Number: M0344

## SIMPLE INSTALLATION

The ED910 comes with five 20mm holes fitted with blind grommets. The enclosure is hinged on the left side, opening reveals four mounting holes.



## INTERNAL CONNECTIONS



## MODELS AVAILABLE

The ED910 is a fixed installation gas detector control unit which is available in four models:-

- ED910 Semiconductor
- ED910 Head electronics (4-20mA)
- ED910 Head electronics (0.2-1.0V)
- ED910 Oxygen Monitor

### ED910 Semiconductor

Suitable for the connection of semiconductor gas sensors manufactured by Electronic Devices Ltd. E.g.

EDP1B uncertified, EDF1B flameproof or EDS1B Intrinsically Safe via Barrier.

Suitable for the detection of flammable gases such as Ammonia, Butane, Propane and some toxic gases, for more gases see list available.

EDP2B uncertified, EDF2B flameproof or EDS2B Intrinsically Safe via Barrier.

Suitable for the detection of flammable gases such as Methane and some toxic gases, for more gases see list available.

EDP3B uncertified, EDF3B flameproof or EDS3B Intrinsically Safe via Barrier.

Suitable for the detection of most Freons such as R22.

EDP3B fig uncertified, EDF3B fig flameproof or EDS3B fig Intrinsically Safe via Barrier.

Suitable for the detection of most Freons such as R11, R12, R143A, R134A etc.

## ED910 HEAD ELECTRONICS (4-20mA)

Designed to accept 4-20mA input from sensor head electronics type EFM/C, EFM/P, EFM/S or EDN manufactured by Electronic Devices Ltd. Some gas sensors require head electronics for correct operation such as Electrochemical Cell Sensors or Catalytic (Pellistor) Sensors. See list of gases for sensor types available.

## ED910 HEAD ELECTRONICS (0.2-

Designed to accept 0.2-1.0Vdc input from sensor head electronics type EDS/C or EDS/P manufactured by Electronic Devices Ltd. Some gas sensors require head electronics for correct operation such as Electrochemical Cell Sensors or Catalytic (Pellistor) Sensors. See list of gases for sensor types available.

## ED910 OXYGEN MONITOR

Designed to accept the two core Oxygen sensor type EDP 6/02 sensor head manufactured by Electronic Devices Ltd. This sensor and hence the ED910 has a range of 0-30% oxygen.



EFM TRANSMITTER



EDS or EDN TRANSMITTER



EDP GAS SENSOR



EDF GAS SENSOR

Note Intrinsically Safe applications require a Electronic Devices Zener Barrier.  
For both Flameproof and Intrinsically Safe installations must meet the HSE or equivalent governing bodies code of practice for Hazardous Area installations.

THIS LIST IS A SUMMARY, IF A PARTICULAR GAS OR CONCENTRATION IS NOT LISTED CONTACT ELECTRONIC DEVICES  
 ELECTRONIC DEVICES CANNOT GUARANTEE THE AVAILABILITY OF CALIBRATION GAS  
 ELECTRONIC DEVICES ADVISE THE STUDY OF COSHH REGULATIONS AND THE EH40 OCCUPATIONAL EXPOSURE LIMITS LIST AVAILABLE FROM THE HSE

GAS	RANGE	SENSOR TYPE	Edt PART No.	I. S. PART No.	UNCERTIFIED PART No.	REPLACEMENT CELL (S ONLY)	NOTES
ACETYLENE	0-100% LEL	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
ACETONE	50-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
ACRYLONITRILE	10-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
AMMONIA	0-100PPM	ELECTROCHEMICAL	EDF 5C 100	EDSC 5C 0-100	EDSC 5C 0-100 NON IS	5C 0-100	Require Head Electronics
AMMONIA	0-100PPM	ELECTROCHEMICAL	EDF 5C 1000	EDSC 5C 0-1000	EDSC 5C 0-1000 NON IS	5C 0-1000	Require Head Electronics
AMMONIA	5000-10000PPM (1.0% VOL)	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		Require Head Electronics
AMMONIA	5000-10000PPM (1.0% VOL)	CATALYTIC	EDF 9C	EDF 9C			
BENZENE	10-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
BUTANE	0-100% LEL	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
CARBON MONOXIDE	0-500PPM	ELECTROCHEMICAL	EDF 7C 500	EDSC 7C 0-500	EDSC 7C 0-500 NON IS	7C 0-500	Require Head Electronics
CARBON MONOXIDE	0-1000PPM	ELECTROCHEMICAL	EDF 7C 1000	EDSC 7C 0-1000	EDSC 7C 0-1000 NON IS	7C 0-1000	Require Head Electronics
CHLORINE	0-50PPM	ELECTROCHEMICAL	EDF CL2 50	EDSC CL2 50	EDSC CL2 50 NON IS	CL2 50	Require Head Electronics
CHLORINE	0-100PPM	ELECTROCHEMICAL	EDF CL2 100	EDSC CL2 100	EDSC CL2 100 NON IS	CL2 100	Require Head Electronics
DIMETHYL AMINE	50-500PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
ETHANE	50-10 000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
ETHYLENE	500-3000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
ETHANOL	500-10 000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
ETHYLENE OXIDE	500-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
FREON 22	500-10000PPM	SEMICONDUCTOR	EDF 3B FIG	EDP3BIS FIG or EDS3B FIG	EDP3B FIG		
FREON 11,12,2,1,13	500-10000PPM	SEMICONDUCTOR	EDF 3B FIG	EDP3BIS FIG or EDS3B FIG	EDP3B FIG		
FREON 404A, 407C	1000-10000PPM	SEMICONDUCTOR	EDF 3B FIG	EDP3BIS FIG or EDS3B FIG	EDP3B FIG		
FREON 134A, 143A	1000-10000PPM	SEMICONDUCTOR	EDF 3B FIG	EDP3BIS FIG or EDS3B FIG	EDP3B FIG		
HEXANE	50-5000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
HYDROGEN	50-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		Require Head Electronics
HYDROGEN	0-10000PPM	ELECTROCHEMICAL	EDF H2 1%	EDSC H2 1%	EDSC H2 1% NON IS	H2 1%	Require Head Electronics
HYDROGEN	0-40000PPM	ELECTROCHEMICAL	EDF H2 4%	EDSC H2 4%	EDSC H2 4% NON IS	H2 4%	Require Head Electronics
HYDROGEN SULPHIDE	0-100PPM	ELECTROCHEMICAL	EDF 4C 100	EDSC 4C 100	EDSC 4C 100 NON IS	4C 100	Require Head Electronics
HYDROGEN SULPHIDE	0-200PPM	ELECTROCHEMICAL	EDF 4C 200	EDSC 4C 200	EDSC 4C 200 NON IS	4C 200	Require Head Electronics
HYDROGEN SULPHIDE	0-500PPM	ELECTROCHEMICAL	EDF 4C 500	EDSC 4C 500	EDSC 4C 500 NON IS	4C 500	Require Head Electronics
HYDROGEN CHLORIDE	0-30PPM	ELECTROCHEMICAL	EDF HCL 30	EDSC HCL 30	EDSC HCL 30 NON IS	HCL 30	Require Head Electronics
HYDROGEN CYANIDE	0-30PPM	ELECTROCHEMICAL	EDF HCN 30	EDSC HCN 30	EDSC HCN 30 NON IS	HCN 30	Require Head Electronics
HYDROGEN FLUORIDE	0-10PPM	ELECTROCHEMICAL	EDF 10C 10	EDSC 10C 10	EDSC 10C 10 NON IS	10C 10	Require Head Electronics
METHANE	0-100%LEL	SEMICONDUCTOR	EDF 2B	EDP2BIS or EDS2B	EDP2B		Require Head Electronics
METHANE	0-100%LEL	CATALYTIC	EDF 8C	EDF 8C			
METHANOL	50-500PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
METHYL ACETATE	50-500PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
METHYL CHLORIDE	10-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
METHYLENE CHLORIDE	50-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
METHYL ETHER	500-3000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
METHYL ETHYL KETONE	50-200PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
METHYL MERCAPTAN	50-3000PPM	SEMICONDUCTOR	EDF 2B	EDP2BIS or EDS2B	EDP2B		
NITROGEN DIOXIDE	0-50PPM	ELECTROCHEMICAL	EDF NO2 50	EDSC NO2 50	EDSC NO2 50 NON IS	NO2 50	Require Head Electronics
NITROGEN OXIDE	0-100PPM	ELECTROCHEMICAL	EDF NO 100	EDSC NO 100	EDSC NO 100 NON IS	NO 100	Require Head Electronics
PENTANE	50-5000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
PROPANE	500-10000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
VINYL CHLORIDE	50-1000PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
SULPHUR DIOXIDE	10-500PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
TRICHLOROETHANE	20-400PPM	SEMICONDUCTOR	EDF 1B	EDP1BIS or EDS1B	EDP1B		
TRICHLOROETHYLENE	50-3000PPM	SEMICONDUCTOR	EDF 3B FIG	EDP3BIS FIG or EDS3B FIG	EDP3B FIG		