

GAS DETECTOR/TRANSMITTER

EGS-...

■ This range of gas detectors can be used to detect leaks and provide an alarm in general commercial and industrial applications.
Can be used stand alone, with a BMS system or with a monitor panel.



Do not expose to extreme ambient or oily/dirty conditions.
24VAC supply, green power led.
Red led and sounder alarm.
Volt free alarm relay rating 1A-Factory set threshold.
Analogue output 0 to 10VDC or 4-20mA
Dimensions 86x120x53 180gm
Standard housing IP41

GAS SENSOR (SPECIFY GAS)

Type	Gas	Range	Relay set point
EGS-NG	Nat Gas (methane)	0 to 5,000ppm	2500ppm
EGS-LPG	LP Gas	0 to 2,000ppm	1000ppm
EGS-CO	Carbon monoxide	0 to 100ppm	30ppm
EGS-R134	Refrig R134	0 to 1000ppm	500ppm
EGS-H	Hydrogen	0 to 2,000ppm	1000ppm
EGS-CO2/IR	Carbon dioxide	0 to 10,000ppm	5000ppm
ECS-OZ	Ozone	0-1ppm	0.2ppm
EGS-O	Oxygen	0 to 25%	19%.
EGS-H2S	Hydrogen sulphide	0 to 30ppm	5ppm
EGS-SD	Sulphur dioxide	0 to 10ppm	2ppm
EGS-ND	Nitrogen dioxide	0 to 10ppm	3ppm
EGS-CL	Chlorine	0 to 10ppm	0.5ppm

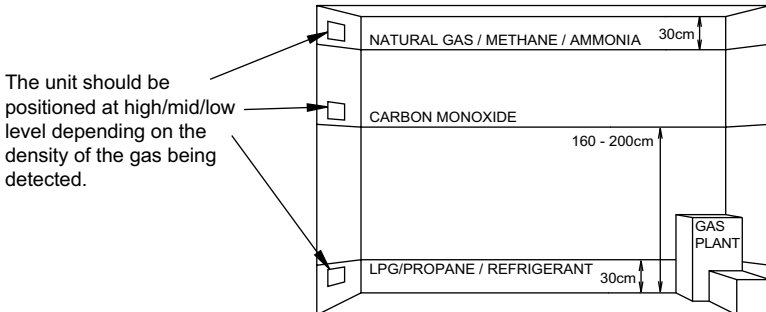
Other gases-please enquire

Default setpoints are in accordance with www.hse.gov.uk/coshh/table1.pdf

OPTIONAL HOUSINGS

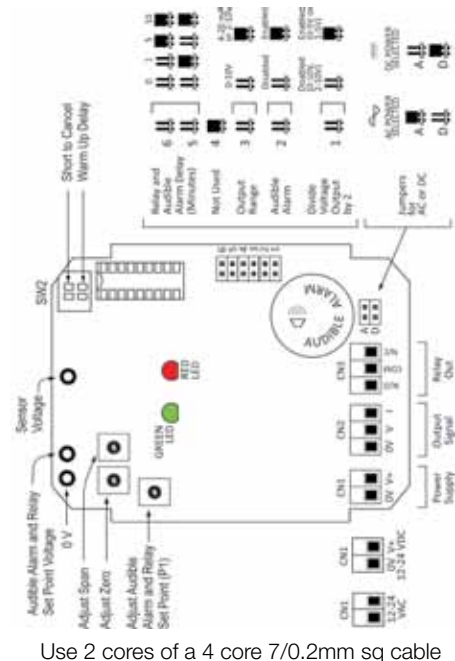


INSTALLATION



The unit should be positioned at high/mid/low level depending on the density of the gas being detected.

WIRING



OPERATION

Do not connect the 0 volt terminals.
See the detailed instructions in the Product Data sheets supplied with the product.

MAINTENANCE

Keep the gas sensors energised and after installation or a period of non use energise the sensor for at least 15mins to allow it to stabilise.
Test annually or in accordance with the local regulations as detailed in the Product Data sheet.
Do not store or install in dusty dirty environments or areas of high solvent concentration.

AIR QUALITY & GAS SENSORS

GAS MONITOR PANELS

EGD-M./ST-MON350

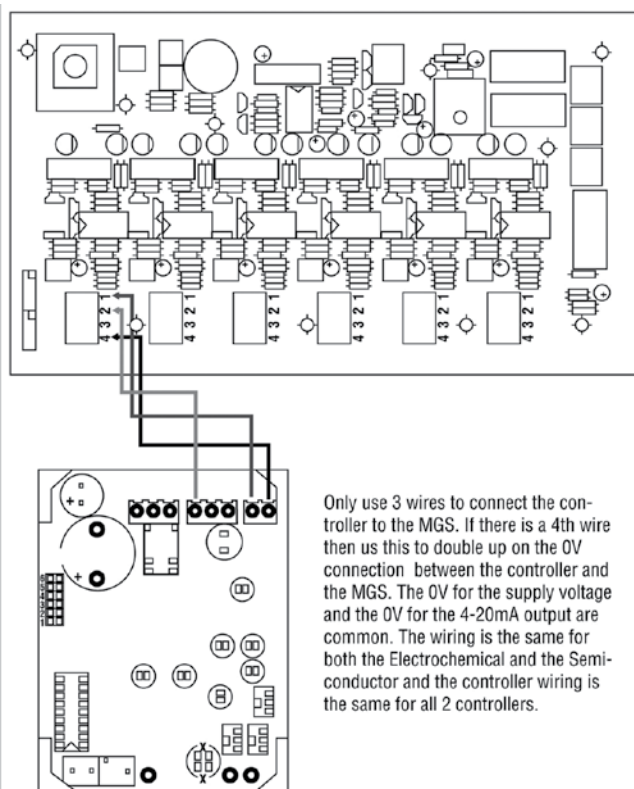
This range of gas sensor monitor panels can be used with EGS or ST.. gas sensors and provide a centralised display of sensor alarm status with visual and audible alarms. By choosing the appropriate sensor and monitor panel up to 65 sensors can be accommodated.



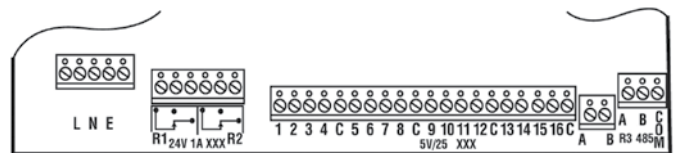
EGD - M

EGD-M1	EGS	1	230VAC	2	orange/red led	192x100x75
EGD-M2	EGS	2	230VAC	2	orange/red led	192x100x75
EGD-M4	EGS	4	230VAC	2	orange/red led	262x255x82
EGD-M6	EGS	6	230VAC	2	orange/red led	262x255x82
ST-MON350	ST..only	up to 32	230VAC	2	240x64 graphic lcd	232x235x60
ST-MON 350R	ST..only	from 32 to 65 sensors	230VAC	2	240x64 graphic lcd	232x235x60

WIRING EGS SENSORS TO EGD-M.. MONITOR PANELS



WIRING ST.. SENSORS TO ST-MON350 MONITOR PANELS



The mains supply should be via a 2pole isolating switch fused at 1A. Use 3x0.75mm sq cable.

See the detailed instructions in the Product Data sheets supplied with the product.

INSTALLATION

Avoid extremely hot, cold or humid environments, strong magnetic fields or direct sunlight.

OPERATION

See the detailed instructions in the Product data sheets supplied with the product.

AIR QUALITY TRANSMITTER 0-10VDC

EAQ..

These products can be used to detect a mixture of pollutant gases in the air ie cigarette smoke, odours and other gases generally found within clubs, pubs, restaurants, kitchens, smoking areas etc. The 0-10vdc linear output signal is proportional to the contamination level produced and can be used to control fresh air dampers or fans etc. A solid state element is used to sense contaminant gases.



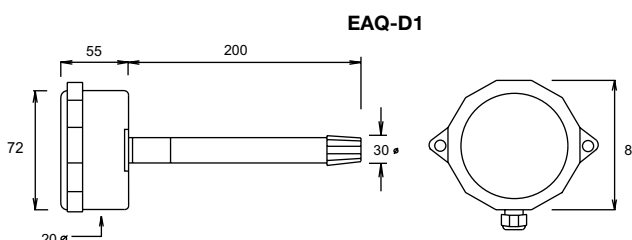
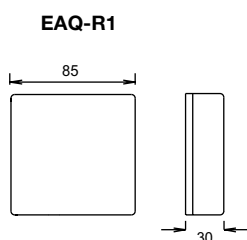
EAQ..Transmitters should not be used to detect Carbon Dioxide (CO2). CO2 transmitters are ideal for use in clean areas ie. theatres, conference rooms. SEE SEPARATE DATA SHEET ON CARBON DIOXIDE TRANSMITTERS.

EAQ-R1

Fits square or round outlet box.
Enclosure Flammability:
EAQ-R1 = UL94-HB
EAQ-D1 = UL94-V0

Type	Mounting	Supply ±15%	Output Signal	Load	Consumption mA	Ambient Temp °C	Accuracy Approx	Enclosure
EAQ-R1	Room	24VAC/DC	0-10vdc	>10 KΩ	<110	0/50	±5%	IP30
EAQ-D1	Duct	24VAC/DC	0-10vdc	>10 KΩ	<110	0/50	±5%	IP65

DIMENSIONS



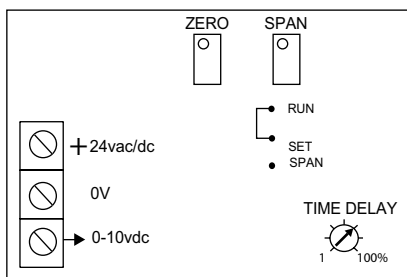
Room transmitters must not be used with excessively oily, dusty, dirty or aggressive media (see duct model). Mount approx 1.6 - 2m high, in an area with good air movement. Avoid areas of localised pollution, heat etc.

Install in the return air duct. Avoid ducts where excessive oily, dusty, dirty or aggressive media may be present ie, kitchens. In this case the duct transmitter should be wall mounted inside the kitchen. A filter is fitted to the probe to overcome minor dust, turbulence & velocity problems. Ensure that the filter does not become blocked.

Best results are achieved within controlled media temperatures between approx. 16 - 28°C.

At lower temperatures the output voltage may increase as temperature falls. Media Limits: 0 / +50°C 0-80% RH non-condensing.

WIRING:

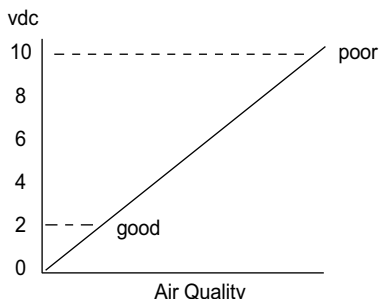


Link RUN for normal operation and 0vdc adjustment.

Link SET SPAN to adjust 8-10vdc.

Turn time delay to min when making adjustments.

OPERATION:



Allow approx 30 minutes for the device to stabilise after switching on. The sensing element will self-clean any dust which may have settled during storage. On initial power up the output will be 10vdc and this will reduce slowly during the self-cleaning process. On-site adjustments are not normally necessary. If any adjustments are required, they should only be carried out after the burn-in period, in clean air and with the time delay set to 0%. The following adjustments can then be made if necessary:

SPAN - Fit link to SET SPAN & adjust to 8-10V indicating bad air quality.

ZERO - Fit link to RUN and adjust to 0V when clean air is detected.

TIME DELAY - Set to 0% for fast response, 100% for slow response. This overcomes problems if the air quality changes for a short period. The response time will also be affected by air movement, temperature and contamination rates.

The transmitter output should be below 2vdc when little or no contaminant is present in the air ie in periods of low or no occupancy. Dampers can therefore be set to minimum fresh air or to close at approx 2vdc. As the air quality worsens the output signal increases to modulate the dampers to the fresh air position or to fully open at about 8-10vdc.

INSTALLATION: Terminals 0.5-2.5mm² Min sensor cable size 7/0.2mm Max length 100m. Screened cable is recommended. The screen should be earthed at controller end only Keep sensor wires away from power cables/units which may cause interference.

AIR QUALITY & GAS SENSORS

CARBON DIOXIDE TRANSMITTER 0-10VDC / 4-20MA

ECD..

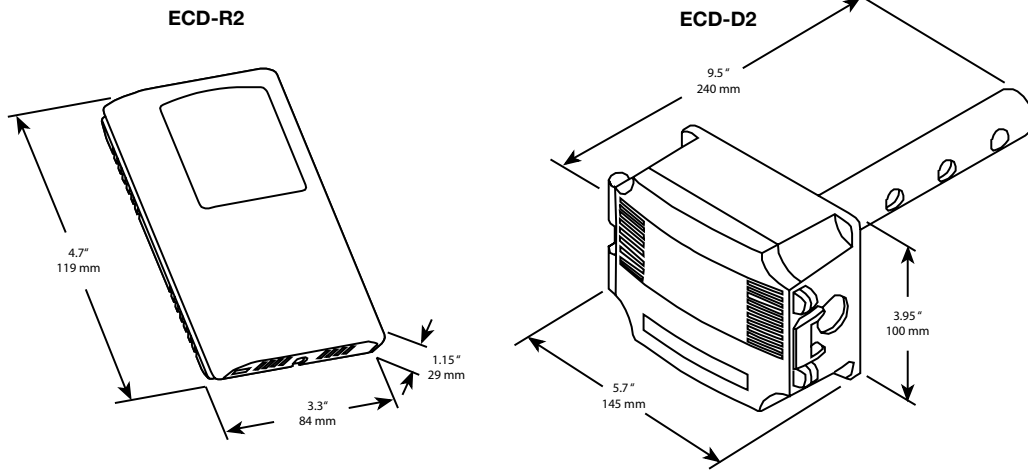
These devices detect the presence of Carbon Dioxide only and give a 0-10vdc or 4-20mA output signal linear across the range. Suitable for use in clean areas such as no-smoking rooms, theatres, conference rooms etc.



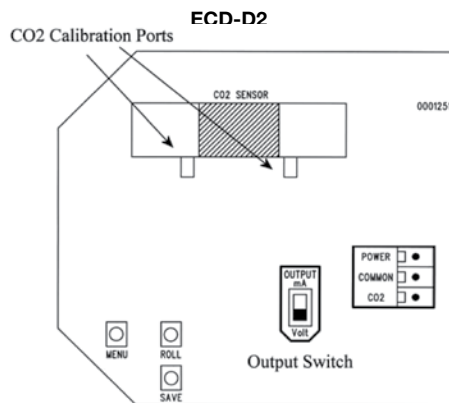
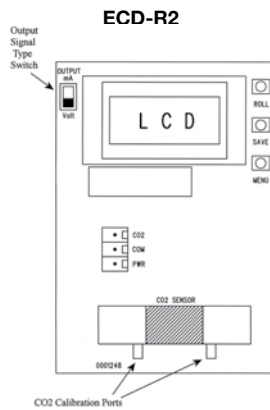
Sensing element : Non-dispersive Infra Red.
 Repeatability ± 20 ppm
 Sensor Accuracy 0-2000ppm ± 75 ppm
 2min Response time
 Calibration interval 3 years dependant on conditions.
 Enclosure Flammability = UL94-HB

Type	Mounting	Range PPM Programmable	Supply $\pm 15\%$	Output Selectable	Consumption Max	Media Temp °C	Media Humidity %RH	Enclosure
ECD-R2	Room	1000-7500	24VAC/DC	0-10vdc/4-20mA	100mA	0/50	5/95	IP30
ECD-D2	Duct	1000-7500	24VAC/DC	0-10vdc/4-20mA	100mA	0/50	5/95	IP64

DIMENSIONS:



WIRING:



INSTALLATION:

ECD-R2 Install in a clean environment in an area with good air movement. Mount in g height 1.5 - 2m
 Avoid areas of localised heat, windows, doors etc
ENSURE VENT HOLES ARE FACING DOWN.

ECD-D2 Install in a clean environment in the return air duct.
 Position the unit away from heat sources.
 The holes in the tubes should face parallel to the air flow.
 The direction of air flow can be reversed.

SET UP USING THE MENU FUNCTION

Eight functions can be set up using the menu using the tree buttons

- MENU** To enter set up or advance to the next step.
- ROLL** To change the programme variables.
- SAVE** To save to memory and advance to the next item.

Press MENU to enter the set up menu.

- Out high Change the range between 1000 and 7500ppm.
- Altitude Set to local altitude.
- Auto Call Corrects sensor drift - ON if varying CO2 level.
OFF if constant CO2 level.

Out type Select 0-5VDC or 0-10VDC. If mA/Volt switch is set to mA then mA will be displayed.

- Text
- Calibrat Used for 1000ppm gas calibration.
- Restore SAVE to restore defaults or MENU to exit.
- Defaults
- Press SAVE to exit menu.