

MP-em

Multi Point Environmental Monitor

The MP-em offers the ideal solution for multi-point monitoring for a wide range of toxic and explosive gases. As well as HCFC, HC and HFC refrigerants, Ammonia and Carbon dioxide which are encountered in the refrigeration industry other gases such as Carbon monoxide, Ethanol, Hydrogen, Natural gas, Propane and Butane can be detected.

This is a cost effective solution for multi-point monitoring of a wide range of gases and refrigerants using remotely hard wired sensors. Four and six point models are available with the ability to detect a different gas on each channel, if required.



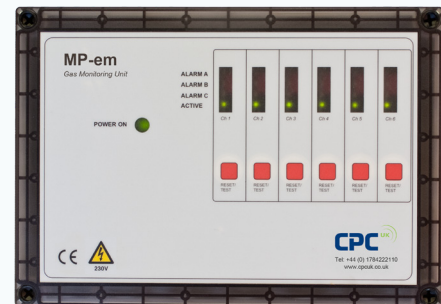
Features at a glance

- » 4/6 channel Microprocessor based monitoring unit.
- » Easy to view LED status indicators.
- » 230 V AC or 24V DC
- » Optional battery back-up.
- » Three alarm thresholds with corresponding time delays.
- » Four alarm relays with SPDT 230 volt rated contacts.
- » Manual/auto alarm reset.
- » Test programme to verify LED/relay operation.
- » IP54 enclosure.
- » Extensive range of remote sensor housings to suit all applications.



The unit is ideally suited to small/medium sized applications where the presence of contaminant gases can be either detrimental to health, environment or potentially explosive. Each sensor is wired back to the microprocessor based controller which provides independent status indication and alarm configuration.

The unit is simple to install and is supplied pre-configured to suit the required application. Depending upon the environment and type of location, a range of remote sensor housings are available to suit every application.



Technical Overview

Calibration

The equipment is supplied factory configured to suit specific applications. Multiple gases can be accommodated on a single MP-em as each channel is totally independent. Standard alarm settings are based on HSE guidelines for toxic gases and no higher than 20% of the LEL for potentially explosive gases. Bespoke calibration settings are available upon request.

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Operation

On power up and after a warm up cycle a green LED for each channel indicates that the system is working correctly.

In the event of gas levels exceeding the alarm concentration limit, the corresponding LED will be illuminated (a Yellow LED indicates a concentration above warning level C, whilst two red LED's indicate concentrations above alarm level B or A. In addition the corresponding volt free SPDT relay will change state, and the optional audible alarm will sound. Alarms can be setup with time delays and either auto or manual reset function.

Fault Function

In the event of a sensor failure or disconnection of the interconnecting wiring a fault condition will be indicated by the status LED's and alarm relay D will change state. Upon a power failure fault relay D will also be de-energised. Connections are available for an optional battery back-up in the event of a power failure.

| Specification | |
|---------------------|---|
| Standard Housing: | Polycarbonate IP66. |
| Power Supply: | 230 V AC or 24 V DC. |
| Status Indication: | Power/Active LED. 3 Alarm LED's for each sensor. Mutable sounder. |
| Output Relays: | 4 SPDT relays rated 230V 5A. |
| Ambient Conditions: | 0°C +50°C, <95% RH |
| Dimensions: | 255 x 180 x 64 mm |
| Weight: | 1.2kg |
| Classification: | CE |

Remote Sensors

A variety of gas sensors housed in an assortment of enclosures can be interfaced to the MP-em. It is essential that the appropriate sensor and housing is selected to suit the gas and environment. A selection of remote sensor housing are detailed, however we recommend discussing your requirements with our technical staff.

Accessories

IP21 Sensor Housing

Model No: EM-RS-IP21



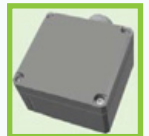
IP54 Splash Proof Sensor Housing

Model No: EM-RS-IP54



IP56 Sensor Housing For CO2 detection only. Low Temp (-30°C) Model available.

Model No: EM-RS-IP56-CO2 (-LT)



Wall Mounted Room Sensor Housing

Model No: EM-RS-RMF



Tubular Sensor Holder (for Plant Monitoring Application)

Model No: EM-RS-TH



Relief Line Sensor Holder. Available in Brass or Steel

Model No: (Brass) EM-RS-VB, (Steel) EM-RS-VS



Explosive-Rated Sensor Housing (ATEX approved)

Model No: EM-RS-EX

