

# MPU

## Multi channel monitoring unit



### KEY FEATURES

- **Microprocessor controlled unit with two, four or six channels**
- **Three independent alarm thresholds per channel**
- **Independent Channel LED status indication**
- **Four alarm relays with 230 volt rated SPDT contacts**
- **Failsafe relay operation on loss of power**
- **Selectable alarm time delay**
- **Manual/auto alarm reset**
- **Built-in service mode and self-test**
- **Optional battery back-up**
- **Audible alarm**
- **24V DC/150mA output for external flash light / siren**

### - Monitoring unit 2/4/6 channels

#### General:

The MPU offers a simple and effective method of detection for a range of toxic and explosive gases together with refrigerants.

With up to 6 channels the unit is ideally suited to small/medium sized applications where the presence of contaminant gases can be either detrimental to health or potentially explosive. The unit has LED status indication in front.

#### Detector Models:

- Room mounting (IP21 or IP54)
- Vent line from pressure relief valves
- Duct mounting
- With Remote sensor
- ATEX -classified

The MPU is suitable to monitor HFC (HCFC) refrigerants, carbon dioxide (CO<sub>2</sub>), Ammonia, hydrocarbons (Hexane), ethanol, hydrogen, methane, propane (LPG) Butane etc.

#### Technical Data:

Indications:	
LED (power):	Power on, green
LED (channel):	Power/Active and Three alarm levels
Inputs:	
Alarm levels:	2,4 or 6 Inputs for 0..5V DC 3 levels per channel, free adjustable for A, B or C-alarm within 0,5V .. 4,8V
Hysteresis alarm level:	+/- ca 100mV
Outputs (relays):	
summary alarm	4 potential free contacts, SPDT A, B, C-alarm and fault alarm Max 230V / 5A.
Output (voltage):	24V DC / 150mA
Power:	230V AC, 50/60Hz / 24V DC (via battery back-up)
Power consumption:	max 10VA
Ambient temperature:	0°C till +50°C
Humidity:	10 till 95% Rh (non condensing)
Material:	ABS/PC
Enclosure:	IP66
Cable glands:	12 x M16
Dimensions:	180 x 255 x 60mm
Weight:	1,15 kg

# Product summary

## Function:

A detector measures continuously the gas concentration and gives an analogue 0-5VDC (non linear) to the monitoring unit.

The unit has three alarm levels, A, B and C, when the thresholds are exceeded the unit's indications (LED's) and relays will be activated.

The unit continuously monitors the cable to the detector and gives an Fault alarm if there is a cable break a short circuit or fault in the sensor head.

The unit can be set to Manual or Automatic alarm reset.

It can therefore be used as either alarm unit or control unit for e.g. start and stop of fans.

## Detectors:

To the unit can a range of detectors for different gases, measuring ranges, different enclosures and for different environment be connected.

Standard room mounting and splash-proof models

- **MP-D, room mounting (IP21)**
- **MP-DS, splash-proof (IP54)**

Detector to monitor vent line from pressure relief valves in refrigeration plants.

- **MP-DR, (IP54)**

Detector for duct mounting

- **MP-DK, Duct mounting (IP21)**

- **GJ-EX, ATEX classified detector**

For detailed information or choice of model and range see each detector brochure or contact us.

## Transmitters:

Other detectors with 0..10V or 4..20mA output can be connected to the unit, contact us for more information.

Example:

- aSENSE models for **carbon dioxide**
- CI21 models for **Ammonia**
- CS21 for **Ammonia, HFC** and explosive gases
- CC28 and EC28


## Measuring ranges and alarm levels:

Relevant alarm levels depend on application.

## Standards and regulations:

Check local standards and regulations as hygienic max values etc.

Be sure wiring is done according to local electrical code requirements.

Order code	Model	Description		
	<b>MPU</b>			
20-310	MPU2C	2 channels, 230V AC / 24V DC		
20-300	MPU4C	4 channels, 230V AC / 24V DC		
20-305	MPU6C	6 channels, 230V AC / 24V DC		
60-300		Pre-set alarm levels (per detector)		