IAM
Integrated Area Monitor

murco
gas detection solutions

The IAM is a stand-alone set point gas monitor that can detect a wide range of gases, and can be expanded into large gas detection systems

The IAM range is ideal for gas detection in occupied spaces in:

- commercial applications such as hotels, apartment blocks, theatres, and airports
- light industrial applications
- and where large systems, up to thousands of sensors, are required.

APPLICATIONS

Typical applications include:

Refrigerant gases

Most refrigerant gases including: Ammonia, Hydrocarbons, and Halocarbons - HFCs, HCFCs, CFCs

Combustible gases

Such as Methane, LPG, Propane, Butane, and Hydrogen

Volatile Organic Compounds

Such as Acetone, Benzene, Carbon Tetrachloride, Chloroform, Ethanol, Toluene, Trichloroethylene

Features

A stand alone monitor with visual, audible alarms, and relays to connect to control systems or to control external devices such as indoor air conditioning units or fans ✓

1 alarm level with visual and audible alarms, and mute button for siren ✓

Filtered sensors (where relevant), and selectable delays to eliminate false alarms ✓

Accurate, stable, long-life sensors ✓

An optional control panel, the IAM-C, allows system expansion to cover multiple locations. It has 16 channels to which IAM monitors or other IAM-C panels can be connected ✓

The IAM gives you reliable-real time continuous monitoring, no blocked filters, tubes, sample transport delays or technical and maintenance problems as experienced by air sampling / aspirated systems ✓

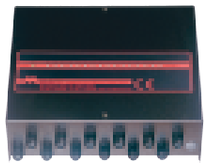
Whatever your business, and whatever your budget, Murco has a gas detection system to suit you

"Eventually every operator will be required to install gas monitoring equipment in order to comply with legislation, protect personnel and the environment and reduce operating costs."

Lorcan Maher, Murco Ltd

Murco Ltd,
114a Georges St Lower, Dun Laoghaire, Co Dublin
tel: + 353 1 284 63 88, **fax:** + 353 1 284 63 89,
email: info@murco.ie, **www.murcogasdetection.com**

Integrated Area Monitor **(IAM)** Data Sheet

Technical Specification	IAM	IAM-C
		
Operating Power Supply	230 V a.c 50 Hz / 120 V a.c 60 Hz	230 V a.c 50 Hz / 120 V a.c 60 Hz
Power Monitoring	Green LED	Green LED
Visual Alarm	Red LED	Red LED
Fault	Siren inactive, Green LED off, and Red LED on	Siren inactive, Green LED off, and Red LED on
Audible Alarms	Internal Sounder with mute button	External Sounder with mute button
Siren Deactivate	For repair or maintenance by onboard jumper	For repair or maintenance by key switch
Volt Free Relay on Alarm	2 Relays: 1 Amp/24 V d.c which both switch on alarm to allow control of equipment i.e. isolating valves, room air conditioning unit or to report to external systems	2 Relays: 10 Amp/230/120 V a.c which both switch on alarm to allow control of equipment i.e. external air conditioning unit, isolating valves or to report to external systems
Reset	Selectable manual or automatic	Remote reset, down stream which will reset any IAM monitor or IAM-C panel connected to a channel, once gas has cleared
Selectable Delayed Response	0, 5, 10 or 15 minutes	N/A
Delayed Start	When the IAM is powered-up it will sense for the gas after an initial warm-up delay of 5 min. The green LED will flash at 1 sec intervals during the warm-up	N/A
Enclosure	Standard: Steel Rating: IP41	Standard: Steel Rating: IP51
Dimensions & Weight	147x88x62mm (29 if recessed) 633g	262 x 265 x 84 mm 2.6 kg
Cabling Controller Monitor	IAM to IAM-C: 300 meters / 984.25 feet, 2 wire cable 7/ 0.2mm	IAM-C to IAM-C: 300 meters / 984.25 feet, 2 wire cable 7/ 0.2mm
Optional Housing	 The sensor may be remotely installed in a suitable recessed back box and fitted with a decorative faceplate to match your decor(Standard supply is Stainless steel)	
Standard Compliance	CE WEEE RoHS EuP	CE WEEE RoHS EuP

OPTIONAL HOUSINGS

* Not available on IR models

Standard

147x88x62mm

633g

IP66

175x165x82mm

800g

IP66 with Splash Guard

175x225x82mm

872g

M42 Thread

Splash Guard

75x50mm

72g

IP66 / Remote Head

175x155x82mm

960g

Remote / Face Plate

86x86

86g

SENSOR INFORMATION	SEMICONDUCTOR (multigas sensor)
Typical Measurement Range	10-10.000 ppm
Temperature Range	-20ºC to +50ºC (IP66 -40 to +50c)
Humidity Range	0 to 95% Non condensing
Sensor Life Time	5 - 8 yrs
Typical Alarm Threshold	24 Seconds
Recovery Time	600 Seconds
Calibration	Local regulations may specify the procedure and frequeny required. Standards generally require annual test or calibration. Refer to Murco for instructions. Semiconductor sensors are non-selective, but calibrated to a specific gas.

GAS	FORMULA	TYPICAL RANGES
SEMICONDUCTOR HFC's typical examples	R134a, R404A, R407, R410A, R507	10-10.000ppm
HCFC'S - typical example	R22	10-10.000ppm
CFC's - typical examples	R11, R12	10-10.000ppm
Hydrocarbons -	Methane (Natural gas) Propane, Butane, LPG Isobutane, H2	0-10.000ppm
Ammonia	NH3	0-10.000pm
VOC's - typical examples	Acetone, Chloroform, Ethanol, Methanol, Methyl and Methylene Choloride Ethyl and Ethylene Chloride	0-10.000pm

"Eventually every operator will be required to install gas monitoring equipment in order to comply with legislation, protect personnel and the environment and reduce operating costs."

Lorcan Maher, Murco Ltd

Murco Ltd,
114a Georges St Lower, Dun Laoghaire, Co Dublin
tel: + 353 1 284 63 88, **fax:** + 353 1 284 63 89,
email: info@murco.ie, **www.murcogasdetection.com**