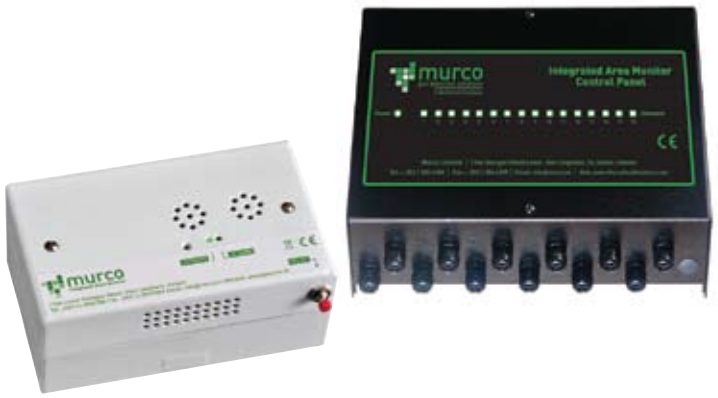
IAM
Integrated Area Monitor

murco
gas detection solutions
A Bacharach Company

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 hotel rooms, hospitals, dormitories (universities), conference rooms, theatres, office blocks, leisure centres, airports, shopping malls, machinery rooms, battery charging rooms (H2), commercial kitchens (LPG and natural Gas)
- light industrial applications
- and for large systems, where 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

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

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 ✓

UL, and CE approved. Compliant with F-Gas Regulation, EH40 and EN378. Qualifies for BREEAM, LEED and Energy Technology List (UK) ✓

> "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."
>
> Murco Ltd

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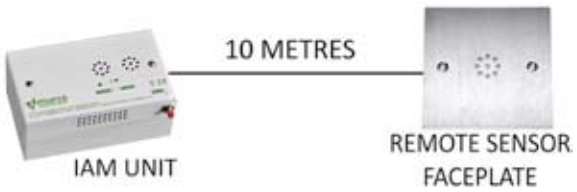
Integrated Area Monitor **(IAM)** Data Sheet

Technical Specification	IAM	IAM-C
		
Operating Power Supply	230 V a.c 50 Hz / 120 V a.c 60 Hz /100 V a.c. 50/60Hz (Japan Only) 11 W Max	230 V a.c 50 Hz / 120 V a.c 60 Hz 11 W Max
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 siren with mute button	External siren with mute button
Siren Deactivate	By onboard jumper	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
Alarm 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 Alarm Delay	0, 5, 10 or 15 minutes	N/A
Warm-up Delay	5 minutes	
Enclosure Rating	Standard: IP41	Standard: Steel IP51
Dimensions & Weight	147 x 88 x 62 mm (29 if recessed) 633g (see housing options below)	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 NSAI Certified Qualified for Energy Technology List	UL 61010-1, CSA C22.2 No. 61010-1, IEC 61010-1, EN 61010-1, EN55011, EN 50270, FCC Part 15, Subpart B, WEEE RoHS EuP

OPTIONAL HOUSINGS

Standard

147x88x62mm

633g

Remote Face Plate (brushed steel option)

86x86mm

86g

Remote Face Plate (brass option)

86x86mm

86g

OPTIONAL CONTROLLER

IAM-CPanel

262x265x84mm

2600g

SENSOR INFORMATION	SEMICONDUCTOR (multigas sensor)
Typical Measurement Range	range 0-10,000 ppm
Temperature Range	-20ºC to +50ºC
Humidity Range	0 to 95% Non condensing
Sensor Life Time	5 - 8 yrs
* Typical Time to Alarm	24 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	STANDARD ALARM SET POINTS
SEMICONDUCTOR HFC's typical examples	R134a, R404A, R407, R410A, R507	**Refrigeration 1,000 ppm Air Conditioning 10,000 ppm
HCFC'S - typical example	R22	**Refrigeration 1,000 ppm Air Conditioning 10,000 ppm
CFC's - typical examples	R11, R12	**Refrigeration 1,000 ppm Air Conditioning 10,000 ppm
Hydrocarbons -	Methane (Natural gas) Propane, Butane, LPG Isobutane, H2	5,000 ppm
Ammonia	NH3	0-10.000pm
VOC's - typical examples	Acetone, Chloroform, Ethanol, Methanol, Methyl and Methylene Choloride Ethyl and Ethylene Chloride	1,000 ppm

* Response times may vary based on temperature of operation, enclosure and environmental conditions.
** This configuration meets BREEAM requirements

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