



**Detects solvents and  
gases such as HCFCs,  
HFCs and PFCs**

# Model IR-148



## This list contains target gases that can be detected with the IR-148

If your application is not listed, please contact the Customer Business Center to have your application evaluated.

**Ranges available are:** 0-10ppm, 0-100ppm, 0-1000ppm, 0-1% volume, 0-10% volume, 0-100% volume and 0-100% LEL.

**Note:** Not all ranges are available on all the gases listed.

<b>A</b>	Acetone Acetonitrile Acrylonitrile Ammonia	<b>O</b>	Octafluoro Cyclo Butane Octafluoro Cyclo Pentane
<b>B</b>	Benzene Butane Butanol 1,3 Butadiene 1-Butyl Acetate	<b>P</b>	Pentane Perchloroethylene (Tetrachloroethylene) Perfluorohexane Perfluoromethyl Vinyl Ether (PMVE) PF5050 Phosgene Propanal Propane Propylene Oxide Propylene Glycol Methyl Ether Acetate
<b>C</b>	Carbon Dioxide (Needs humidity in stream) Carbon Monoxide (Needs humidity in stream) Carbon Tetrachloride Chloroform Cyclopentane	<b>R</b>	Refrigerants: R-11 R-113 R-114 R-12 R-123 R-124 R-125 R-13 R-134A R-141B R-142B R-143A R-152A R-218 R-22 R-227 R-23 R-32 R-401A (Suva MP 39) R-402A (HP 80) R-404A (HP 62) R-407C (AC 9000) R-408A R-409A R-410A (AZ20) R-500 R-502 R-507 R-508B (Suva 95)
<b>D</b>	1,2 Dichloroethane Diethyl Benzene Diethyl Ether (Ethyl Ether) Dimethyl Ethylamine Difluoromethane Dimethylamine Dowtherm J	<b>S</b>	Solkane 365/227 Styrene Sulphur Hexafluoride (SF <sub>6</sub> )
<b>E</b>	Ethane Ethanol Ethyl Acetate Ethyl Benzene Ethylene Ethylene Oxide	<b>T</b>	Tetrafluoroethylene Tetra Hydrofuran Toluene 1,1,1 Trichloroethane 1,1,2 Trichloroethane Trichloroethylene Triethylamine
<b>H</b>	Halon 1211 Halon 1301 Heptane Hexafluoro- 1.3 Butadiene Hexafluoropropylene Hexane Hexene HFE 347E HFE 7100	<b>V</b>	Vinyl Chloride Vinyl Fluoride
<b>I</b>	Isceon 89 Isopropanol (2-Propanol) Isopropyl Alcohol Isobutane Isopentane	<b>X</b>	Xylenes (ortho, meta, para or natural)
<b>M</b>	Methane Methanol Methyl Ethyl Ketone (MEK) Methyl Fluoride Methyl Formate Methyl Iodide Methyl Isobutyl Ketone (MIBK) Methyl Methacrylate Methylene Chloride		
<b>N</b>	N-Butanol N-Hexane N-Pentane Nitrogen Trifluoride Nitrous Oxide (N <sub>2</sub> O) (Needs humidity in stream)		

# General Specification



General Specification	
<b>Typical</b>	Performance characteristics subject to change, depending on gas to be monitored and full-scale range.
<b>For 0-1000ppm Range</b>	Accuracy: 0-100ppm $\pm 2$ ppm; 100-1000ppm $\pm 10\%$ reading Linearity: 0-100ppm linear, 100-1000 $\pm 2\%$ of full scale Sensitivity: 2ppm Resolution: 1ppm
<b>Note</b>	Specifications for other ranges dependant on application. Consult factory.
<b>Reproducibility</b>	$\pm 2$ ppm over 12 months at specified operating conditions
<b>Response</b>	Updated reading every 7 seconds
<b>Operating Temperature</b>	0-50°C, 32-122°F
<b>Temperature Effect</b>	$\pm 0.3\%$ per °C of reading
<b>Relative Humidity</b>	0-99% non-condensing - no effect on reading
<b>Sample Flow Rate</b>	1.5 liter/minute
<b>Maximum Total Tubing Length</b>	150f with $\frac{1}{8}$ " ID 500f with $\frac{3}{16}$ " ID
<b>Operating Power Requirements</b>	120VAC $\pm 10\%$ at 0.56A, or 240VAC; $\pm 10\%$ at 0.3A
<b>Alarm Relays</b>	3 relays @ 8A resistive
<b>Approvals</b>	CE approval: EN55011 & EN 50082-2/EN6100-4-2
<b>Outputs:</b>	Analog 4-20mA sourcing (dependent on configuration) RS23C (standard), RS422 or RS485 (optional module)
Physical Enclosure Information	
<b>NEMA 4</b>	Dimensions: 460 x 410 x 180mm (18" x 16 x 7") (H x W x D) Weight: 19kg (40lbs)
<b>19" Rack Mount</b>	Dimensions: 180 x 450 x 390mm (7" x 17 $\frac{5}{8}$ x 15 $\frac{1}{4}$ ") (H x W x D) Weight: 9kg (19lbs)
<b>Explosion Proof</b>	Dimensions: 490 x 490 x 240mm (19 $\frac{1}{8}$ x 19 $\frac{1}{8}$ x 9 $\frac{1}{2}$ ") (H x W x D) Weight: 46kg (100lbs)



# Our Product Range



## Fixed Gas Monitoring

Honeywell Analytics offers a wide range of fixed gas detection solutions for a diverse array of industries and applications including: Commercial properties, industrial applications, semiconductor manufacturers, energy plants and petrochemical sites.

- » Detection of flammable, oxygen and toxic gases (including exotics)
- » Innovative use of 4 core sensing technologies – paper tape, electrochemical cell, catalytic bead and infrared
- » Capability to detect down to Parts Per Billion (ppb) or Percent by Volume (%v/v)
- » Cost effective regulatory compliance solutions

## Portable Gas Monitoring

When it comes to personal protection from gas hazards, Honeywell Analytics has a wide range of reliable solutions ideally suited for use in confined or enclosed spaces.

These include:

- » Detection of flammable, oxygen and toxic gases
- » Single gas personal monitors – worn by the individual
- » Multi-gas portable gas monitors – used for confined space entry and regulatory compliance
- » Multi-gas transportable monitors – used for temporary protection of area during site construction and maintenance activities

## Technical Services

At Honeywell Analytics, we believe in the value of great service and customer care. Our key commitment is providing complete and total customer satisfaction. Here are just a few of the services we can offer:

- » Full technical support
- » Expert team on hand to answer questions and queries
- » Fully equipped workshops to ensure quick turnaround on repairs
- » Comprehensive service engineer network
- » Training on product use and maintenance
- » Mobile calibration service
- » Customised programmes of preventative/corrective maintenance
- » Extended warranties on products

### Find out more

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