Model IR-148

Detects solvents and gases such as HCFCs, HFCs and PFCs
### Model IR-148

<table>
<thead>
<tr>
<th>List column</th>
<th>Chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Acetone, Acetonitrile, Acrylonitrile, Ammonia</td>
</tr>
<tr>
<td>B</td>
<td>Benzene, Butane, Butanol, 1,3 Butadiene, 1-Butyl Acetate</td>
</tr>
<tr>
<td>C</td>
<td>Carbon Dioxide (Needs humidity in stream), Carbon Monoxide (Needs humidity in stream), Carbon Tetrachloride, Chloroform, Cyclopentane</td>
</tr>
<tr>
<td>D</td>
<td>1,2 Dichloroethane, Diethyl Benzene, Diethyl Ether (Ethyl Ether), Dimethyl Ether, Difluoromethane, Dimethylether, Dowtherm J</td>
</tr>
<tr>
<td>E</td>
<td>Ethane, Ethanol, Ethyl Acetate, Ethyl Benzene, Ethylene, Ethylene Oxide</td>
</tr>
<tr>
<td>H</td>
<td>Halon 1211, Halon 1301, Heptane, Hexafluoro- 1.3 Butadiene, Hexafluoropropylene, Hexane, HFE 347E, HFE 7100</td>
</tr>
<tr>
<td>I</td>
<td>Isceon 89, Isopropyl (2-Propanol), Isopropyl Alcohol, Isobutane, Isopentane</td>
</tr>
<tr>
<td>M</td>
<td>Methane, Methanol, Methyl Ethyl Ketone (MEK), Methyl Fluoride, Methyl Formate, Methyl Iodide, Methyl Isobutyl Ketone (MIBK), Methyl Methacrylate, Methylene Chloride</td>
</tr>
<tr>
<td>N</td>
<td>N-Butanol, N-Hexane, N-Pentane, Nitrogen Trifluoride, Nitrous Oxide (N2O) (Needs humidity in stream)</td>
</tr>
<tr>
<td>O</td>
<td>Octafluoro Cyclo Butane, Octafluoro Cyclo Pentane</td>
</tr>
<tr>
<td>P</td>
<td>Pentane, Perchloroethylene (Tetrachloroethylene), Perfluorohexane, Perfluoromethyl Vinyl Ether (PMVE), PF350, Phosgene, Propene, Propanal, Propane, Propylene Oxide, Propylene Glycol Methyl Ether Acetate</td>
</tr>
<tr>
<td>S</td>
<td>Solkane 365/227, Styrene, Sulphur Hexafluoride (SF6)</td>
</tr>
<tr>
<td>T</td>
<td>Tetrafluoroethylene, Tetra Hydrofuran, Toluene, 1,1,1 Trichloroethane, 1,1,2 Trichloroethane, Trichloroethylene, Triethylamine</td>
</tr>
<tr>
<td>V</td>
<td>Vinyl Chloride, Vinyl Fluoride</td>
</tr>
<tr>
<td>X</td>
<td>Xylenes (ortho, meta, para or natural)</td>
</tr>
</tbody>
</table>

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.
General Specification

Typical

Performance characteristics subject to change, depending on gas to be monitored and full-scale range.

For 0-1000ppm Range

Accuracy: 0-100ppm ±2ppm; 100-1000ppm ±10% reading
Linearity: 0-100ppm linear, 100-1000 ±2% of full scale
Sensitivity: 2ppm
Resolution: 1ppm

Note
Specifications for other ranges dependant on application. Consult factory.

Reproducibility
±2ppm over 12 months at specified operating conditions

Response
Updated reading every 7 seconds

Operating Temperature
0-50°C, 32-122°F

Temperature Effect
±0.3% per °C of reading

Relative Humidity
0-99% non-condensing - no effect on reading

Sample Flow Rate
1.5 liter/minute

Maximum Total Tubing Length
150ft with 1/8” ID
500ft with 1/4” ID

Operating Power Requirements
120VAC ± 10% at 0.56A, or 240VAC ±10% at 0.3A

Alarm Relays
3 relays @ 8A resistive

Approvals
CE approval: EN55011 & EN 50082-2/EN6100-4-2

Outputs:
Analog 4-20mA sourcing (dependent on configuration)
RS23C (standard), RS422 or RS485 (optional module)

Physical Enclosure Information

NEMA 4
Dimensions: 460 x 410 x 180mm (18” x 16 x 7”) (H x W x D)
Weight: 19kg (40lbs)

19” Rack Mount
Dimensions: 180 x 450 x 390mm (7” x 17/8” x 15/8”) (H x W x D)
Weight: 9kg (19lbs)
## 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**

www.honeywellanalytics.com

**Contact Honeywell Analytics:**

#### Europe, Middle East, Africa, India

**Life Safety Distribution AG**

Weihraullee 11a

CH-8610 Uster

Switzerland

Tel: +41 (0)44 943 4300

Fax: +41 (0)44 943 4398

gasdetection@honeywell.com

**Technical Services**

EMEAI: HAexpert@honeywell.com

US: ha.us.service@honeywell.com

AP: ha.ap.service@honeywell.com

[www.honeywell.com](http://www.honeywell.com)

#### Americas

**Honeywell Analytics Inc.**

405 Barclay Blvd.

Lincolnshire, IL 60069

USA

Tel: +1 847 955 8200

Toll free: +1 800 538 0363

Fax: +1 847 955 8210

detectgas@honeywell.com

**Technical Services**

EMEAI: HAexpert@honeywell.com

US: ha.us.service@honeywell.com

AP: ha.ap.service@honeywell.com

[www.honeywell.com](http://www.honeywell.com)

#### Asia Pacific

**Honeywell Analytics Asia Pacific**

#508, Kolon Science Valley (I)

187-10 Guro-Dong, Guro-Gu

Seoul, 152-050

Korea

Tel: +82 (0)2 2025 0300

Fax: +82 (0)2 2025 0329

analytics.ap@honeywell.com

**Technical Services**

EMEAI: HAexpert@honeywell.com

US: ha.us.service@honeywell.com

AP: ha.ap.service@honeywell.com

[www.honeywell.com](http://www.honeywell.com)

---

**Please Note:**

While every effort has been made to ensure accuracy in this publication, no responsibility can be accepted for errors or omissions. Data may change, as well as legislation, and you are strongly advised to obtain copies of the most recently issued regulations, standards, and guidelines. This publication is not intended to form the basis of a contract.