# Honeywell





CM4-P Pyrolyzing gas monitor for continuous detection of Nitrogen Trifluoride

# CM4-P Pyrolyzing Gas Monitor for NF<sub>3</sub>

## Feature

- Continuous Monitoring on 4 Points
- Chemcassette Technology
- Integral Freon<sup>®</sup> Scrubbers
- Analog and Serial Outputs
- 300'(90m) Sampling Distance
- Table, Wall or Rack Mount Versions
- High Temperature Pyrolysis
- Coiled Quartz Pyrolyzer Design
- Integral Audio and Visual Alarms

## Benefit

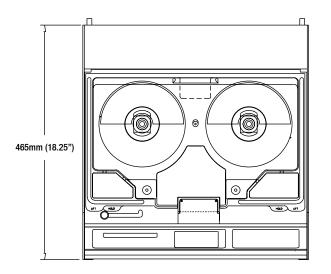
- Total surveillance all the time
- Reliable, interference free method provides
  physical evidence of events
- Scrubs commonly used Freons before pyrolysis ensuring only  $\mathrm{NF}_{\scriptscriptstyle 3}$  is detected
- Permits easy installation into virtually all annunciation and shutdown systems
- Monitors can be positioned conveniently
  with minimal fab intrusion
- Flexible to meet any requirement
- Ensures complete conversion of NF<sub>3</sub>
- Heating element does not contact sample, ensuring complete pyrolysis
- Easily identifies all events

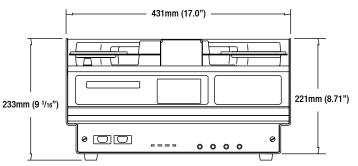
CM4-P provides reliable, continuous detection of Nitrogen Trifluoride. The unit features an integral pyrolyzer that converts NF<sub>3</sub> to Hydrogen Fluoride for detection on the mineral acids Chemcassette<sup>®</sup>. The unit features a variety of outputs. Chemcassette sensors provide 4 weeks or more of uninterrupted surveillence.

# **General Specification**



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Detection Technique	Chemcassette® Technology via pyrolysis to HF
Gases Available	Nitrogen Trifluoride
CM4-P Detectable Gases	Range    Nitrogen Triflouride (NFs)  0-50ppm    LDL  1.0ppm
Montoring Points	Four
Sampling Distance	90m (300ft) $^{1}\!/^{a''}$ OD x $^{3}\!/_{16''}$ ID FEP grade Teflon <sup>®</sup> tubing only (Consult your local HA agent for longer distance requirements.)
Exhaust Tubing	50ft $^{1}/_{4}$ " OD x $^{3}/_{16}$ " ID Polypropylene Longer distances possible with larger ID
Display	20 character vacuum fluorescent status, alarm, and power LED's
Keypad	16 key, sealed membrane style
Local Alarm Indication	Audible and visual (LED) per point
Relay Outputs	Relay contacts (500mA minimum) 2A @120VAC, form C contacts. Programmable low and high levels, maintenance, watch dog, energized or de-energized, latching or nonlatching
Current Loop Outputs (per Point)	4-20mA isolated, 4 Individual (optional) 4-20mA non-isolated, 4 individual (optional) 2-4mA range available (for fault indications)
Serial Output	RS232 serial printer output (optional)
Serial Communications	RS232, RS422, and RS485 (all optional)
Additional Protocols supported	LonWorks®, (LonMark® compliant) Profibus (via 4-20mA to L2 bus)
GUIs Supported	Intellution FIX-32, Wonderware, InTouch
Operating Temperature	10° to 40°C (50° to 104°F)
Weight	25kg (55lbs)
Initial Warmup	< 10 minutes
Operating Voltages	100/110VAC @ 50/60Hz 230VAC @ 50/60Hz
Power Consumption	5A @ 110V (approximately) 4A @ 230V (approximately)





## **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)
- Sost 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

Life Safety Distribution AG Wilstrasse 11-U31 CH-8610 Uster Switzerland Tel: +41 (0)44 943 4300 Fax: +41 (0)44 943 4398 gasdetection@honeywell.com

## **Technical Services**

ha.emea.service@honeywell.com

www.honeywell.com

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H\_CM4-P\_DS1998-0225\_V3\_EMEA 10/07 © 2007 Honeywell Analytics

#### Americas

Honeywell Analytics Distribution, Inc. 405 Barclay Blvd. Lincolnshire, IL 60069 USA Tel: +1 847 955 8200 Toll free: +1 800 538 0363 Fax: +1 847 955 8208 detectgas@honeywell.com

## Asia Pacific

Honeywell Analytics Asia Pacific #508, Kolon Science Valley (1) 187-10 Guro-Dong, Guro-Gu Seoul, 152-050, Korea Tel: +82 (0)2 2025 0307 Fax: +82 (0)2 2025 0329 analytics.ap@honeywell.com

