



CM4 toxic gas monitor, interference free and low maintenance of ownership solutions for the semiconductor, pharmaceutical and chemical industries

CM4 Toxic Gas Monitor

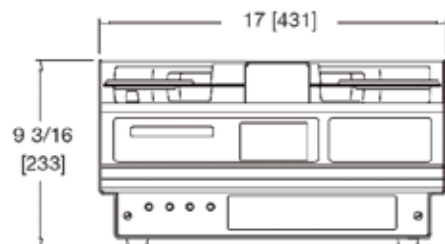
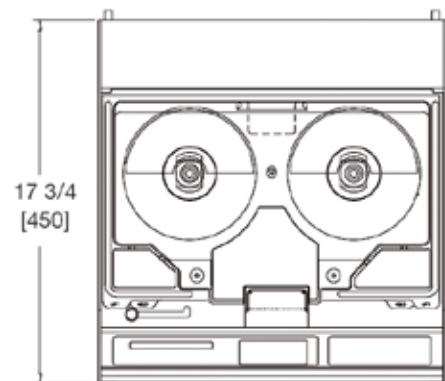


Features

- **Continuous Monitoring on 4 Points**
Total surveillance all the time
- **Chemcassette® Technology**
Reliable, interference-free method provides physical evidence of events
- **Analog and Serial Outputs**
Permits easy installation into virtually all annunciation and shutdown systems
- **300' (90m) Sampling Distance**
Monitors can be positioned conveniently with minimal fab intrusion
- **Table, Wall or Rack Mount Versions**
Flexible to meet any requirement
- **LonWorks® Interface Available**
Permits peer to peer communication and low cost of installation
- **Serial Printer Option**
Permits archiving of all important events and system configurations
- **Integral Audio and Visual Alarms**
Easily identifies all events

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This CM4 unit represents the latest in interference free, low maintenance, low cost of ownership solutions for the semiconductor, pharmaceutical and chemical industries. Its low profile 1/4" tubing minimizes intrusion into process areas, ducts, gas cabinets, etc. A variety of signal outputs are available making CM4 a truly flexible product. It easily installs into most building alarm systems. An optional rack mount enclosure and printer fill out the product range, providing convenient housing and documentation capability. The unit is capable of detecting over 25 gases-some within the same family (hydrides, mineral acids, etc.)



Inches [mm's]

Technical Specification



Substance	Response Time to TLV	Range
Amines		
Ammonia II (NH ₃)	10	3-75ppm
Dimethyl Amine (DMA)	30	0.3-30ppm
Tetrakis Dimethyl Amino Titanium (TDMAT)	30	0.1-7.5ppm
Triethylamine (TEA)	10	0.3-35ppm
Chlorine III (Cl₂)	20	0.05-5.0ppm
Chlorine II (Cl₂) Low Level	20 @ 200ppb	7-2000ppb
Chlorine Dioxide (ClO₂)	50	30-1000ppb
Fluorine (F₂)	30	0.6-10ppm
Hydrazines		
Dimethyl Hydrazine (UDMH)	240	3-5000ppb
Hydrazine (N ₂ H ₄)	60	0.7-1000ppb
Hydrides		
Arsine (AsH ₃)	10	5-500ppb
Arsine Dry (AsH ₃)	25	5-500ppb
Arsine (AsH ₃) Low Level	11	0.3-25ppb
Diborane (B ₂ H ₆)	30	15-1000ppb
Germane (GeH ₄)	240	100-2000ppb
Hydrogen Selenide (H ₂ Se)	35	6-500ppb
Phosphine (PH ₃)	10	5-3000ppb
Silane (SiH ₄)	25	0.5-50ppm
Tertiary Butyl Arsine (TBA)	30	12-500ppb
Hydrogen Cyanide (HCN)	15	0.5-50ppm
Hydrogen Sulphide (H₂S)	10	0.5-100ppm
Hydrogen Sulphide (H₂S) Low Level	30 @ 500ppb	8-2000ppb
Mineral Acids		
Boron Trifluoride (BF ₃) Low Level	80	100-1500ppb
Hydrogen Bromide (HBr)	20	0.3-30ppm
Hydrogen Bromide (HBr) Low Level	60 @500ppb	50-2000ppb
Hydrogen Chloride (HCl)	15	0.5-15ppm
Hydrogen Chloride (HCl) Low Level	20 @ 500ppb	80-8000ppb
Hydrogen Fluoride (HF)	25	0.3-30ppm
Hydrogen Iodide (HI)	20	0.1-25ppm
Nitrogen Dioxide (NO₂)	15	0.3-30ppm
Phosgene (COCl₂)	15	7-1000ppb

Nitrogen Trifluoride (NF₃) available, see separate datasheet on CM4-P

Technical Data Specifications

Detection Technique	Chemcassette Technology
Gases Available	See chart above
Monitoring Points	Four
Sampling Distance	300ft (90m) 1/4" OD X 3/16" ID FEP grade Teflon® tubing only. (Consult your local HA agent for longer distance requirements.)
Exhaust Tubing	50ft (15m) 1/4" OD x 3/16" ID Polypropylene. Longer distances possible with larger ID exhaust tubing
Display	20 character vacuum fluorescent status, alarm, and power LEDs
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 deenergized, latching or nonlatching
Current Loop Outputs (per Point)	4-20mA isolated (optional) (2-4mA range available for fault indicators)
Serial Output	RS232 serial printer output (optional)
Serial Communications	RS232, RS422, and RS485 (all optional)
Additional Protocols supported	LonWorks®, (LonMark® compliant optional) Profibus (via 4-20mA to L2 bus optional) ~ Supported Intellution, FIX 32, Wonderware, InTouch, Cimplicity
Operating Temperature	50° to 140°F (10° to 40°C)
Shipping Weight	55lbs
Operating Voltages	100/110 VAC @ 50/60Hz, 230 VAC @ 50/60Hz
Power Consumption	≈3A @ 110V ≈2A @ 230V

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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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