

Vertex M

Honeywell



An 8 to 24 point toxic gas monitoring system, Vertex M with Chemcassette[®] technology offers the most reliable protection at the lowest overall cost

Multi-Point Toxic Gas Monitoring System



Easy to use

- Touch screen for easy access to data
- Software updates via CD-ROM or network to all system components
- Configuration profile editing and data retrieval are all achievable without taking the unit offline
- Radio frequency identification tag (RFID) ensures Chemcassettes® are installed into appropriately programmed analyser, eliminating human error
- On-line help system

Security

- Multiple levels of password protection
- Reconfigure security setup without taking unit offline

Low cost of ownership

- Vertex M's smaller footprint and greater density of points reduce your cost per point
- Eight points per analyser lowers Chemcassette® costs
- Maximised 24 point systems provide low cost per point as compared to other continuous monitors
- One system monitors up to three gas families and more than 40 gases
- You can split your sample to more than one analyser

Easy to maintain

- Vertex M uses cost-effective XP Chemcassettes®, providing up to three months of continuous monitoring
- Simplified replacement of Chemcassettes® and automated optics verification
- No dynamic calibration required
- One-touch flow balancing
- Easy access to analysers, pumps, power supplies and touch screen from front panel
- Onscreen interactive electronic manual

Advanced communications

- Built-in configurable PLCs with optional 64 relay contacts non-isolated; 32 isolated
- Standard OPC interface for easy integration into your existing factory automation system or HMI
- Optional Ethernet/CIP, LonWorks®, DeviceNet™, DF1 Interface, PROFIBUS, MODBUS Plus, MODBUS/TCP, ControlNet or 4-20mA outputs available
- Optional Chemcam camera permits viewing of stain, locally or remotely, for proof of gas event. Image is electronically saved for future retrieval
- Optional remote control/viewing software enables total visualisation of the monitor screens at a remote PC

Vertex M is one of the industry's most flexible, advanced toxic gas monitoring systems offering parts per billion detection levels and physical evidence of a gas leak. Vertex M ensures productivity as well as life safety.

Flexible

The Vertex M System includes as standard one eight-point analyser. As your monitoring needs change, Vertex M expands, offering you up to 24 points of continuous gas detection.

Place your sampling points up to 120 metres (400 feet) from the system. There is a choice of universal analyser modules and/or pyrolyzer analysers.

(Note: If Vertex M is used with one pyrolyzer module, the maximum number of points of detection is 16).

Reliable

Vertex M offers powerful, built-in system redundancy as standard equipment to effectively safeguard against downtime.

- Back-up pump and internal power module
- Chemcassette® technology provides physical evidence of a gas event
- System data back-up (if main data acquisition PC fails, analysers continue to monitor, log data and alarm)
- Automated leak test with line integrity option



Industries Served

High Tech Applications

- Semiconductor Manufacturing
- Photovoltaic Manufacturing
- Flat Panel Display Manufacturing
- LED Manufacturing
- Nanotechnology
- Research Labs
- Government/Aerospace/Homeland Defense
- Environmental Air Quality

Industrial Applications

- Specialty Chemicals
- Inorganic Chemicals
- Plastics and Fibres
- Agricultural
- Perimeter Monitoring
- Food Processing/Cold Storage
- Wastewater Treatment
- Pulp and Paper
- Power Generation
- Printing

Technical Information



General Specifications	
Uses	8 to 24 point toxic gas monitor configurable for use with up to 3 universal Chemcassette analysers or combination 1 pyrolyzer analyser/1 universal Chemcassette analyser
Power Requirements	110 or 230 VAC
Physical Dimensions	
Height x Width x Depth	144.8cm (56") x 61cm (24") x 91cm (36")
Weight	250kg (551lbs.) with 3 analysers Universal Analyser: 14kg (31lbs.) Pyrolyzer Analyser: 22kg (48lbs.) Empty Vertex M Rack: 208kg (458lbs.)
Tubing Dimensions	
Sample Lines	6.35mm (¼) O.D. x 4.83mm (0.190") I.D. FEP Teflon or 6.35mm (¼) O.D. x 3.9mm (0.156") I.D. FEP Teflon Sampling Distance: Up to 121m (400ft.) maximum
Exhaust Line	12.7mm (½) O.D. x 9.5mm (3/8) I.D. polypropylene tubing, Exhaust line: 15m (50ft.) maximum
Operating Characteristics	
Operating Voltage	110 or 230 VAC ± 10% (underload) @ 50/60 Hz; 15 Amps maximum, single phase
Operating Temperature	15°C to 35°C (59°F to 95°F)
Operating Humidity	20-65% RH
Operating Altitude	-305m (-1000ft.) to 1829m (6000ft.) above sea level
Communications/Interface	
Network Interface	OLE for Process Control (OPC) Interface
Output Options	DeviceNet, ControlNet, Profibus - DP, LonWorks, DF1, Modbus/TCP, ModBus Plus, Ethernet/CIP
Analog Option	4-20mA (24 channels)
Relay Options	Isolated (08X) or Non-Isolated (016X); Via PLC: 32 relays for 8 channel isolated relay option; 64 relays total for 16 channel non-isolated relay option
Alarm/Fault	Capable of A1 and A2 alarms per point, per point maintenance/instrument faults, as well as general analyser A1, general analyser A2, and general analyser instrument/maintenance faults
HMI/LCD Screen	1024 x 768 resolution, touch screen operation with at-a-glance system status
Other Optional Accessories	
	Sample line integrity test, Duct adaptors, ChemCam video monitoring camera, Remote viewing/control software

Continuous Monitoring

Detects more than 40 toxic gases
Vertex M monitors virtually every gas used in fabs and other High-Tech/Industrial facilities, including:

ACT935 Photoresist Stripper	Cupra Select	Hydrogen Chloride	Phosgene - Hi Range	Sulphur Tetrafluoride
Ammonia	Diborane	Hydrogen Chloride/LL	Phosphine	TertButyl Arsine
Arsenic Pentafluoride	Dichlorosilane	Hydrogen Cyanide	Phosphorous Oxychloride	TertButyl Phosphine
Arsenic Trichloride	Digermane	Hydrogen Fluoride	Phosphorous Pentachloride	Tertiarybutylarsine
Arsenic Trifluoride	Dimethylamine	Hydrogen Iodide	Phosphorous Pentafluoride	Tertiarybutylphosphine
Arsine	Dimethylsilane	Hydrogen Selenide	Phosphorous Tribromide	Tetrachlorosilane
Boron Tribromide	Disilane	Hydrogen Sulphide	Phosphorous Trichloride	Tetrakis (dimethylamino) titanium
Boron Trichloride	Dry Arsine	n-Butylamine	Phosphorous Trifluoride	Tin Tetrachloride
Boron Trifluoride	Fluorine	Nitric Acid	Silane	Titanium Tetrachloride
Carbonyl Fluoride	Germane	Nitrogen Dioxide	Silane Low Level	Trichlorosilane
Chlorine	Hexachlorodisilane	Nitrogen Trifluoride	Silicon Tetrachloride	Trimethylsilane
Chlorine Dioxide	Hydrogen Bromide	Phenyl Trichlorosilane	Silicon Tetrafluoride	Tungsten Hexafluoride
Chlorine Trifluoride	Hydrogen Bromide/L	Phosgene	Stibine	Xenon Difluoride

Note: New calibrations are continually developed at our plant. If you have a gas not listed here, contact your Honeywell Analytics regional sales representative.

Accessories

The Vertex M offers a variety of accessories to meet your site requirements.

Analyser Options

- **Chemcam:** a camera located in the analyser which enables viewing of the stain on the display
- **Line Integrity Kit:** automatic integrity check for line pressure

Communications Options

- Configurable for LonWorks®, DeviceNet™, PROFIBUS, ControlNet, MODBUS Plus, DF1 interface, isolated 4-20mA outputs, 8-Channel isolated relay, 16-channel non-isolated relay, Ethernet, OPC. and others

Installation/Operational Options

- Floor Mounting
- Duct Sampling
- Tubing

To find out more about Vertex M please contact us on

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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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