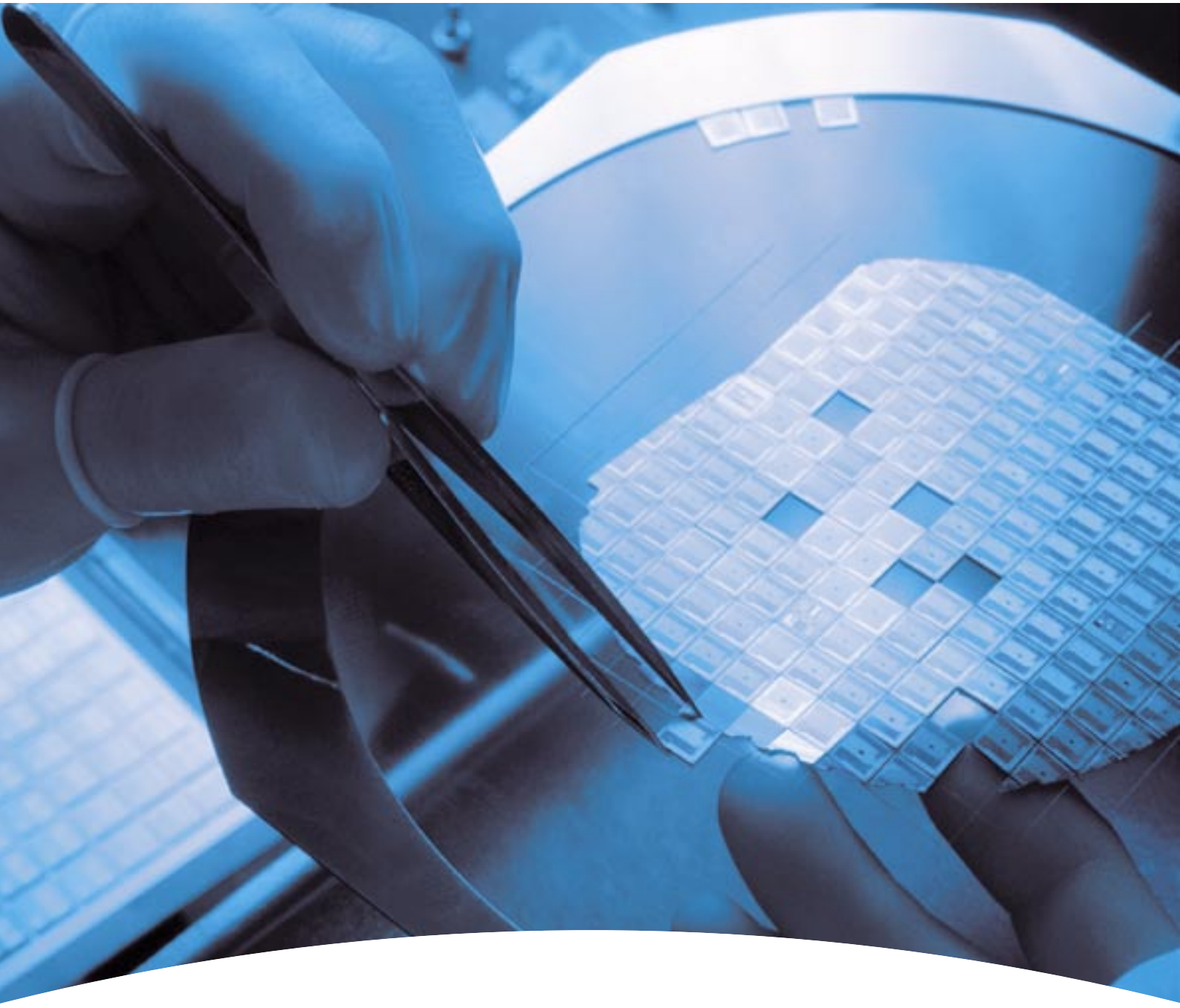
MDA Scientific Multi-Point Toxic Gas Monitoring System

Honeywell



Vertex™ provides the most sensitive and reliable multi-point low level toxic gas monitoring system backed by physical evidence of an actual gas release.

Multi-Point Toxic Gas Monitoring System

Vertex™ provides a cost-effective monitoring solution that adapts to your changing gas detection needs

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 unit offline
- Radio frequency identification tag (RFID) ensures Chemcassettes® are installed into appropriately programmed analyzer, 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's™ smaller footprint and greater density of points reduce your cost per point
- Eight points per analyzer lowers Chemcassette® costs
- Maximized 72 point systems provide low cost per point as compared to other continuous monitors
- One system monitors up to nine gas families and more than 40 gases
- You can split your sample to more than one analyzer

Easy to maintain
- Vertex™ 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
- No flow balancing
- Easy access to analyzers, pumps, power supplies and touch screen from front panel
- Onscreen interactive electronic manual with integral video

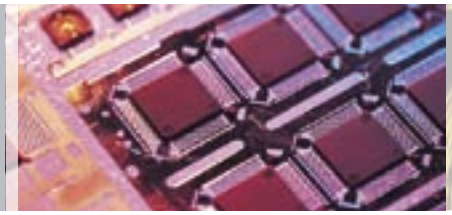
Advanced communications
- Built-in configurable PLCs with optional 176 relay contacts
- Standard OPC interface for easy integration into your existing factory automation system or HMI
- Optional Ethernet/CIP, LONWORKS®, DeviceNet™, DF1 Interface, PROFIBUS, Modbus Plus, Modbus/TCP, ControlNet, or isolated 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 visualization of the monitor screens at a remote PC

Flexible
Start your Vertex™ System with as little as eight points. As your monitoring needs change, Vertex™ expands, offering you up to 72 points of continuous gas detection. Place your sampling points up to 400 feet (120 meters) from the system. There is a choice of universal analyzer modules and/or pyrolyzer analyzers.

Reliable
Vertex™ 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 gas event
- System data back-up. If main data acquisition PC fails, analyzers continue to monitor, log data and alarm
- Drip resistant cap for system protection from overhead leaks
- Automated leak test with line integrity option

General specification



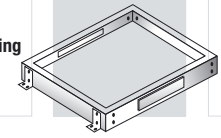
Continuous monitoring

Detect More Than 40 Toxic Gases
Vertex™ monitors virtually every gas used in fabs, including:

ACT935 Photoresist Stripper	Germane	Phosphorous Trifluoride
Ammonia	Hexachlorodisilane	Silane
Arsenic Pentafluoride	Hydrogen Bromide	Silicon Tetrachloride
Arsenic Trichloride	Hydrogen Chloride	Silicon Tetrafluoride
Arsenic Trifluoride	Hydrogen Cyanide	Stibine
Arsine	Hydrogen Fluoride	Sulfur Tetrafluoride
Boron Tribromide	Hydrogen Iodide	Tertiarybutylarsine
Boron Trichloride	Hydrogen Selenide	Tertiarybutylphosphine
Boron Trifluoride	Hydrogen Sulfide	Tetrachlorosilane
Carbonyl Fluoride	n-Butylamine	Tetrakis (dimethylamino) titanium
Chlorine	Nitric Acid	Tin Tetrachloride
Chlorine Dioxide	Nitrogen Dioxide	Titanium Tetrachloride
Chlorine Trifluoride	Nitrogen Trifluoride	Trichlorosilane
Cupra Select	Phenyl Trichlorosilane	Trimethylsilane
Diborane	Phosgene	Tungsten Hexafluoride
Dichlorosilane	Phosphine	Xenon Difluoride
Digermane	Phosphorous Oxychloride	
Dimethylamine	Phosphorous Pentachloride	
Dimethylsilane	Phosphorous Pentafluoride	New calibrations are continuously developed
Disilane	Phosphorous Tribromide	
Fluorine	Phosphorous Trichloride	

Accessories

Floor Mounting



Duct Adapter

- **Chemcam Camera**
- **Line Filters**
- **Tubing**

World leader in gas detection
Honeywell Analytics offers you more than 30 years' experience in developing patented Chemcassette® tape technology. Vertex™ Multi-Point Toxic Gas Monitoring System complements Honeywell Analytics' CM4, electrochemical cell, catalytic bead and infrared monitors.

Honeywell Analytics provides complete integrated systems solutions for semiconductor facilities, from consulting to turnkey installation.

For more information,
call 1-800-538-0363 (USA) or 1-954-514-2700

24 hour service
Honeywell Analytics' global team of technical service professionals is at your service 24 hours a day, 7 days a week in more than 60 countries.

MDA Scientific has developed a sophisticated range of highly sensitive gas detection equipment, designed to perform in ways that define new gas detection performance levels providing total solutions to protect people, improve production efficiency and reduce costs.

The MDA Scientific range of toxic gas detection

Single Point Monitor

The SPM overcomes the difficulty of ensuring that basic units for toxic gas monitoring are accurate and free of interference from environmental conditions or other chemicals, by using our interference-free Chemcassette® detection technique. The SPM can also be used outdoors and has heating and cooling options to suit environmental conditions.

Vertex

Vertex provides a flexible, cost-effective monitoring solution that can adapt to changing needs. Using advanced Chemcassette® software and optics technologies, Vertex can monitor from 8 to 72 points of gas detection, up to 9 gas families and more than 40 gases.

Model IR-148

The Model IR-148 detects solvents and gases such as HCFCs, HFCs and PFCs that are otherwise difficult to monitor without the effect of cross-interfering gases.

Midas®

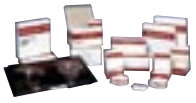
Midas® can measure virtually all the toxic and flammable gases found in manufacturing and storage applications. The range is in fact a universal transmitter design that differs significantly from the Lifeline II range which had separate passive, extractive and pyrolyzer variants with different footprints and performance characteristics.

CM4

CM4 provides monitoring of toxic gases at four locations, up to 300 feet away – detection of ppb levels of toxic gases at multiple points. Points are monitored continuously. Leaks are detected within seconds.

IN-USA

The IN-USA range of microprocessor controlled analyzers detect trace amounts of ozone (O_3) gas. Systems can be configured with relays and different signal output options for integration within life safety networks. High levels of signal sensitivity and resistance to false alarm are enabled by the use of advanced ultraviolet (UV) lamp detection systems.



Chemcassette®

The Chemcassette® detection system is the heart of an MDA toxic gas monitoring system. Chemcassettes® use a dry reagent medium to collect and analyze air to detect gas leaks. When the Chemcassette® is exposed to a target gas, it changes color in direct proportion to the concentration of gas present. MDA Scientific monitors read color intensity changes and determine the gas concentration by comparison to a known gas response pre-programed into the instrument.

Find out more
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