

Lower your cost-per-point gas monitoring with next-generation FT-IR technology

ACM 150



Integrate gas detection into a single unit

- Detect virtually any gas, chemical or odour in an industrial process*
- Up to 40 measuring points can be detected sequentially
- 80 configurable relay points for increased flexibility

Cut monitoring costs over life of device

- Sealed aluminum body prevents moisture intrusion, protecting critical internal components
- Double IR scan ensures reliable performance, reduces false alarms
- Optimised built-in measuring/self diagnostics eliminate on-site gas calibration
- Desiccant replacement cycle of 3 to 5 years

Boost gas monitoring performance

- Composite sampling of up to 4 measuring points provides faster measurement
- Easy to service gas cell with stainless steel body construction prevents costly downtime
- Better SNR performance allows for lower LDL measurements

Simplified touchscreen operation

- Superfast processor improves response time
- Large user-friendly touchscreen interface
- Flexible communications options

*Refer to the ACM 150/100 Gas List or ask your regional sales representative for more information. More than two hundred gases detectable. Our engineers may be able to generate a new method for gases not listed.

Detect more gases, in many cases at lower levels, with proof of response. Cut service time in half. Ensure uptime and reliable performance with ACM 150 by Honeywell Analytics.

Multi-Point gas detection for enhanced safety

ACM 150 brings you the latest FT-IR technology within a centralised gas monitoring system to offer you many advantages:

- Up to 40 measuring points can be centrally located to one device, such as process tools, gas and chemical storage units, gas cabinets, distribution boxes, emission measurement and ambient air monitoring.
- Up to 15 gases can be detected per measuring point, lowering your cost per gas per point monitoring.
- Self diagnostic programming detects faults and critical alarms, eliminating many maintenance calls.
- Communications options meet your unique site requirements (Lonworks®, ControlNet™, Modbus®, Profibus®)

Improved gas detection performance

The ACM 150 matches your company's increased productivity demands with a newly designed FT-IR bench that provides better LDL (Lower Detectable Limit) performance for many gases along with reduced maintenance and service requirements over the life of the instrument.

Choose the ACM 150 for enhanced safety, improved performance and lower cost per point monitoring.

Get in touch with Honeywell Analytics now

Find out how our systems integration team can save you money, and enhance safety and productivity at your company.



Centralised Gas Monitoring System



Relays – Every ACM 150 is equipped with 80 programmable relays

FT-IR Bench – Provides more gas detection options (up to 15 gases per measuring point are possible); software method can be configured to detect virtually any gas, odour or chemical compound

Sealed Aluminum Body – Prevents moisture intrusion, reduces EMI and boosts uptime

New Gas Cell – Stainless steel construction provides best in class SNR performance with ease of service and maintenance

Easy Maintenance Access –

All connections for power, sample lines, compressed air and nitrogen are located on the top of the unit

Touchscreen Computer –

Quickly evaluates the IR spectra, stores critical data, transmits alarms, activates point relays and monitors diagnostics and test functions

Software – Enhanced data processing reduces system slowdowns while boosting performance and reliability

Robust Pump – Electric or venturi (compressed air) pump options, with redundant, electric backup pump as standard

Reliable information at a glance

The large touchscreen computer is easy to use and navigate. Backed by a superfast processor, with updates provided every 15 seconds, ACM 150 speeds response time and practically cuts out 'idle time'. The net result? Increased reliability and performance, quicker analysis of site conditions, reduced risk of false alarms. And with ACM 150's flexible communication outputs, critical processes can be performed on site or via a remote PC.



Warnings and Alarms

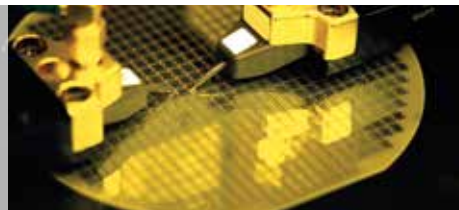
Current operational status is displayed at the top of the monitor alerting the operator to any conditions requiring attention.



Demand Scan Mode

Provides a quick means of monitoring any area during an emergency and reporting the levels of hazardous gases present there.

Technical Summary



Performance Specifications	
Analysis method	Continuous scan FT-IR (Fourier Transform Infrared) analyser
Gas cell path	5.0m path length
Gases monitored*	Organic, PFC, CFC, HFC, Metal Organic, NF ₃ and a wide variety of other inorganic gases
Lower detection limit* (LDL)	0.1 to 2.0 ppm (gas dependant)
Scanning rate	≤15 sec per point
Sample point capacity	Available in 10, 20, 30 or 40 point configurations Composite sampling up to 4 points
Data archiving (default)	30 days for all spectra 90 days for alarms
Applicable standards	EN 50270, EN 61010, UL 61010
Installation	Indoor only
Altitude	Up to 2,000m (6,562ft)
Temperature range	5°C to 30°C (41°F to 86°F)
Relative humidity	80% at temperatures up to 31°C (88°F)
Main supply voltage	±10% of the nominal voltage
Overvoltage	Category II
Pollution degree	2
Ingress protection	IP 20
Facilities Requirements	
Sample line tubing	6.35mm (0.25") ID x 9.5mm (0.375") OD, PTFE (Polypropylene alternate)
Sample line inlet	9.5mm (0.375") Swagelok® connector
Power in	230 VAC, 10 A or 115 VAC, 20 A
Purge gas, N₂	5 to 10 psi, 10 l/min
Venturi requirements	90 to 120 psi, 320 l/min
Exhaust	38.1mm (1.5") NPT, 15 cfm
Overall dimensions (HxWxD)	1,676mm x 864mm x 635 mm (66" x 34" x 25")
Operating weight	349 kg (770 lbs)
Shipping weight	470 kg (1036 lbs)
Interface and Communications	
Interfaces	Touch screen user friendly interface Remote access via web browser
Relay outputs contacts	80 x DPDT (double-pole double-throw), programmable by sample point and gas type
Max. ratings	30 VDC, 2 A
Optional communications	Lonworks®, ControlNet™, Modbus®, Profibus® OPC drivers Others on request
Options	
Pump system	Venturi and electric back up pump Dual pump (electric)
Line leak	Line leak option with check valves



What are the differences between ACM 100 and ACM 150?



	ACM 150 has ...	Resulting in ...
FT-IR technology	<ul style="list-style-type: none"> • Utilises newer FT-IR technology 	<ul style="list-style-type: none"> - Lower LDL for some gases - Better signal to noise
False alarm protection	<ul style="list-style-type: none"> • Double IR scan 	<ul style="list-style-type: none"> - Ensures reliable performance - Reduces risk of false alarms
FTIR bench	<ul style="list-style-type: none"> • More modern bench 	<ul style="list-style-type: none"> - Greater detectable range - Provides faster measurement
	<ul style="list-style-type: none"> • Less weight 	<ul style="list-style-type: none"> - Energy efficiency saves cost to run - Reduces cost to service – one person can service instead of two
	<ul style="list-style-type: none"> • Fully sealed aluminum body 	<ul style="list-style-type: none"> - Improves EMI performance - Limits moisture intrusion - Less maintenance - Maximises uptime
New gas cell	<ul style="list-style-type: none"> • Stainless steel body construction vs glass 	<ul style="list-style-type: none"> - Provides best-in-class signal to noise performance - Eases service and maintenance
	<ul style="list-style-type: none"> • ZnSe window vs KRS5 	<ul style="list-style-type: none"> - Maximises stability in high humidity - Mirror toxicity reduced with ZnSe coating = less risk to uptime - Less risk to breakage = less risk to uptime, less repair expense
	<ul style="list-style-type: none"> • Fully sealed gas cell 	<ul style="list-style-type: none"> - Only mirrors exposed to sample gas - Less maintenance - Maximises uptime
New touchscreen with new software / HMI	<ul style="list-style-type: none"> • Enhanced data processor • Better memory usage • Improved viewing angle with larger LCD • New interface similar to Vertex • New fan-less operation • Supports USB • Consistent alarm / fault notification with other Honeywell Analytics' products 	<ul style="list-style-type: none"> - Faster performance - Reduces system slowdowns and database issues - Improved look and feel; easier to see - Simplifies operation - Increases reliability - More convenient access - Often sold together, simplifies learning
Network router	<ul style="list-style-type: none"> • New design – industrial grade, high capacity 	<ul style="list-style-type: none"> - More reliable communications - Well suited for high volume transfers
Service and maintenance	<ul style="list-style-type: none"> • Optimised built-in measuring/ self diagnostics eliminate on-site calibration • Desiccant replacement cycle is now 3-5 years vs 1 year • All connections are now located at top of unit to ease access • No mirror adjustments needed • Server weight now requires only 1 person vs 2 people 	<ul style="list-style-type: none"> - All contribute to significant decrease in time and cost to maintain and service
	<ul style="list-style-type: none"> • Easier mirror adjustment 	<ul style="list-style-type: none"> - Improves energy output - Eliminates need for time consuming 3D level light alignment
	<ul style="list-style-type: none"> • Connection ports now on front of router (vs back) 	<ul style="list-style-type: none"> - Far simpler and faster to service

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 four 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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We Save Lives

