

IS YOUR ONE-STOP SOURCE FOR GAS DETECTION INSTRUMENTATION, WHATEVER YOUR APPLICATION MAY BE.

Founded in 1975, Interscan has solved thousands of gas detection problems in plants just like yours. Whether you need one of our familiar battery-operated portable units, or one of our new Automation-Based[™] Systems, you can be confident that you will be getting the most cost-effective solution to your monitoring problem.

The Interscan difference is our applications expertise! Anyone can sell you hardware. At Interscan, we make sure that what you buy from us is *ideally suited* to the application at hand. In gas detection, one size most definitely does **not** fit all. We really believe that you deserve personalized service in today's highly impersonal world.

So, you are most cordially invited, in the pages that follow, to

DISCOVER INTERSCAN!!!

How Do I Get Started?

- 1] Determine the gas or gases of interest, and the desired full scale measuring range of each.
- 2] List any potentially interfering gases that may be present. This will be useful information for our applications people.
- 3] Decide whether this application is for portable survey monitoring, or for a fixed, continuously operating monitoring system.
- **4]** Determine if you would like some form of data acquisition or recording.
- **5]** Now, refer to the appropriate catalog section covering either portable/survey or continuous monitoring applications. Note that there are two portions of the continuous monitoring section: Single point/two point and multipoint applications.

Portable/Survey Monitoring Applications

Interscan's portable analyzers are available for CO, Cl₂, ClO₂, ethylene oxide, HCHO, hydrazine, HCl, HCN, H₂S, NO, NO₂, SO₂ and other gases. All of our portable analyzers utilize Interscan's own patented (US Patent Number 4,017,373) electrochemical voltammetric sensors.

Choose from two configurations – 1000 or 4000 Series

Features – 1000 Series

- An integral sample pump, powered by rechargeable Ni-Cd batteries (supplied), giving up to 10 hours of continuous service
- Panel meter indication of battery condition...instantly
- Audible and visual alarms
- Analog output (0-100mV f.s.)
- Integral battery charger
- Available in an MSHA-approved version (2G-3129)

Options – 1000 Series

- Special ranges
- Special packaging
- Digital panel meter
- Power and signal input to recorder via mating connector (allowing rechargeable battery operation of recorder, as well as analyzer)
- Dual gas models

Dimensions 7¹/₄"H x 6"W x 11¹/₂"D (184 x 152 x 292 mm) Weight 8 lb (3.6 kg)

Features – 4000 Series

- An integral sample pump, powered by rechargeable Ni-Cd batteries (supplied), giving up to 10 hours of continuous service
- Panel meter indication of battery condition...instantly
- Audible and visual alarms
- Nylon/Cordura carrying case
- Plug-in "calculator-type" battery charger
- UL Classified Intrinsically Safe, for use in hazardous locations, Class I, Groups A, B, C, and D (10X0)
- CENELEC Approved Unit available

Options – 4000 Series

- Digital panel meter
- Special ranges (triple range not available)
- Analog output (0-100 mV f.s.)
- Power and signal input to recorder via mating connector (allowing rechargeable battery operation of recorder, as well as analyzer)

Dimensions 7"H x 4"W x 8⁷/₈"D (178 x 102 x 225 mm) Weight 4¹/₂ lb (2.0 kg)



1000 Series "Standard" Portable

Portable Analyzers — Ordering Information

Please note that the **1000 Series instrument**, and the **4000 Series instrument with analog meter** are being phased out, and are subject to stock on hand.

--Applications requiring UL intrinsic safety will be fulfilled with 4000 Series analog meter units, until certification is awarded for the digital models--

FOR ORDERING INFORMATION AND MODEL NUMBERS:

Please visit our website at: <u>www.gasdetection.com</u> consult factory, or see pricing schedule



4000 Series "Compact" Portable

Continuous Monitoring-Single Point and Two Point Applications

If you need to perform gas detection at only one or two points, or have several points that are either widely separated, and would each be better served by a self-contained monitoring system, check out Interscan's LD or RM Series. These tough, field-proven units are available for CO, Cl₂, ClO₂, ethylene oxide, HCHO, hydrazine, HCl, HCN, H₂S, NO, NO₂, SO₂ and other gases – and use our own patented electrochemical voltammetric sensors.

LD Series Interscan's LD Series is the ultimate in single point continuous monitoring systems. Each and every component has been chosen based on years of experience in some of the most demanding environments imaginable. What's more, the units are easy and inexpensive to maintain. An impressive array of options allows the specifier to put together a system ideally suited to the application at hand

RM Series Interscan's Rack-Mount configured analyzers are intended for those applications in which line power operation is desired (allowing continuous operation, and the incorporation of heavier-duty alarm signals or alarm contacts), but in which the rigorous NEMA 4X packaging of the LD Series is not required. Designed to be installed in a standard 19 inch (483 mm) rack, or to be used on the bench, their open frame construction, and use of standard electrical and pneumatic components allow easy incorporation of the units into a system. Most of the LD Series' features and options are available.

LD and RM Series – Ordering Information

GAS		Range (ppm)	Resolution (ppm)	LD Series	RM Series
со	Carbon Monoxide	0-1999	±1	LD-14	RM-14
Cl ₂	Chlorine	0-199.9	±0.1	LD-34	RM-34
CIO ₂	Chlorine Dioxide	0-19.99	±0.01	LD-33	RM-33
EtO	Ethylene Oxide	0-199.9	±0.1	LD-20	RM-20
нсно	Formaldehyde	0-19.99	±0.01	LD-16	RM-16
Hydrazine		0-19.99	±0.01	LD-18	RM-18
HCI	Hydrogen Chloride	0-19.99	±0.01	LD-36	RM-36
HCN	Hydrogen Cyanide	0-19.99	±0.01	LD-28	RM-28
H₂S	Hydrogen Sulfide	0-19.99	±0.01	LD-17	RM-17
NO	Nitric Oxide	0-199.9	±0.1	LD-54	RM-54
NO ₂	Nitrogen Dioxide	0-199.9	±0.1	LD-15	RM-15
SO ₂	Sulfur Dioxide	0-199.9	±0.1	LD-24	RM-24

Analog or control output can be set to meet individual needs e.g. 0-100 mV and 4-20 mA could be specified to equal 0-100 ppm CO on the LD-14. even though the instrument can read much higher than this.



Features – RM Series

- Pneumatic interface
- (via rear panel fittings)
- 0-100 mV analog output
- Rotameter Loss of flow alarm

Integral pump

- Alarm contacts
- 4-20 mA analog output

Options – RM Series

Wrap-around cover

Dimensions 7"H x 19"W x 12"D (178 x 483 x 305 mm) Weight 8 lb (3.6 kg)

- Super-rugged NEMA Type 4X fiberglass reinforced polyester enclosure
- pump
- Rotameter
- contacts, continuously adjustable through the full scale measuring range, activating dedicated relays

Options – LD Series Alternative packaging,

resistant enclosures Audible alarm Visual alarm

Enclosure heating and

Loss of flow alarm Triple alarm set points Loss of power alarm

cooling



LD Series Single Point Monitor



LD Series Two Point Monitor

LD Series Single Point Monitor Dimensions 22"H x 18"W x 81/2"D (559 x 457 x 216 mm) Weight 22 lb (10.0 kg)

LD Series Two Point Monitor Dimensions 27"H x 20"W x 8"D (686 x 508 x 203 mm) Weight 54 lb (24.5 kg)

Features – LD Series

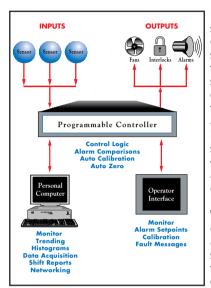
- Integral diaphragm
- Analog output (0-100 mV and 4-20 mA f.s.) • Low and high alarm

Continuous Monitoring-Multipoint Applications

For monitoring at three or more locations, we are proud to present the product line that is the talk of the industry — Interscan's exclusive Automation-Based[™] Gas Detection Systems.

Now, you can specify a system with the exact operation you need, with no compromise. The design makes this possible.

Built around a programmable logic controller (PLC), sensors, and an operator interface (or PC), the features are limited only by your imagination.



Naturally, we can supply a system for any of the gases detected by our own sensors – but that's only the beginning. Since *any* sensor with an analog or discrete output connects to the PLC, you can mix and match toxic, combustible, and process sensors — yours, ours, theirs — without worrying about anybody's proprietary controller.

Will you have hundreds of sensors? Do you need an elaborate control scheme, or data acquisition with live and historical trending? Not a prob-

lem. If you can describe it, we can do it.

ARC-MAX[®]

The perfect companion for your Interscan monitoring system, or any monitoring system

Arc-Max^{\circ} is a computerized data acquisition system, that will continuously store input from all kinds of workplace sensors, and produce reports of employee exposure to toxics, automatically.

Using the powerful MicroScan 2000 SCADA (Supervisory Control and Data Acquisition) engine, alarm logs, live and historic trending, and specialized reports giving key occupational health information are available at the click of a mouse.

Up to four independent shifts per day can be assigned, to better analyze exposure data. The shifts can overlap.

The shift report tracks the following, for each sensor monitored by $\ensuremath{\mathsf{Arc}}\xspace{\mathsf{Max}}\xspace{\ensuremath{\mathsf{sh}}}\xspace{\mathsf{Max}}\xspace{\ensuremath{\mathsf{sh}}}\xspace{\ensuremath{sh}}\xspace{\ensuremath{sh}}\xspace{\ensurem$

- Current value
- Shift minimum value and time of occurrence
- Shift maximum value and time of occurrence
- 8 hour average
- The four highest 15-minute average exposures that occur during the shift (STEL)

WHY YOU NEED ARC-MAX®

Suppose that you've been a good corporate citizen, and have installed sensors for toxic compounds all around your plant, to protect your employees. Ask yourself this: Can you document long-term employee exposure? Do you have any idea how close their exposure is to the allowable levels?



This is a carbon monoxide monitoring system that sequentially samples eight points in a vehicular tunnel, with the object of ventilation control. Some of the features include automatic calibration, three levels of alarm individually settable for each point, sample point enable/bypass, sequence override, and a fully adjustable alarm delay/fan control package.

This is a five point continuously operating sulfur dioxide monitoring system, used in an industrial plant. Some of the features include two levels of alarm individually settable for each point, a log tracking when each channel was last calibrated and how many alarms occurred within a pre-set time period, and sample flow fault indication.



Ordering Information– Automation-Based[™] Gas Detection Systems

Since these systems are built to your exact specifications, a proposal is prepared in response to your inquiry. In addition to the information mentioned under "How Do I Get Started?" on the second page of this catalog, the following is also important.

- List any process sensors you wish to incorporate into the system, along with their ranges of measurement
- Describe desired alarm operation
 - How many levels of alarm
 - Delays
 - Alarm grouping *i.e.* alarm levels from multiple sampling locations are evaluated in concert to activate an additional function
- Consider data acquisition, trending, and report formats

High concentration alarms are fine, but they're not enough!! Of greater importance these days is long-term low level exposure. That's the kind of exposure that lawsuits are based on. Unless you have a documented record of exposure, if you're sued, you'll be scrambling for data, desperately trying to re-create the past.

THE ARC-MAX® ADVANTAGES

Arc-Max[®] is Completely Self-Contained

Unlike most competitive systems, Arc-Max® produces the reports you need *directly from the program*. There is no reason to download files to a spreadsheet package, unless you want to do specialty analysis. What's more, all reports are generated without interrupting the current data collection.

Arc-Max[®] is Easy To Use

The system is supplied totally configured for your application, and is ready to run right out of the box. No programming is required. All you do is connect your inputs.

Arc Max® Has Data Integrity

All sensitive functions, including setting alarm levels, establishing shift times, and exiting the program itself, are under password access.

You owe it to yourself to find out more about Arc-Max[®]. Contact us for a FREE presentation disk, or log onto <u>http://www.gasdetection.com/arcmax2000.htm</u> Protect your employees and your company.

interscan corporation

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