



## 4000 Series Portable Gas Analyzers

InterScan's portable gas analyzers are available for Br<sub>2</sub>, CO, Cl<sub>2</sub>, ClO<sub>2</sub>, C<sub>2</sub>H<sub>4</sub>, ethylene oxide, HCHO, H<sub>2</sub>, hydrazine, HBr, HCl, HCN, H<sub>2</sub>O<sub>2</sub>, H<sub>2</sub>S, NO, NO<sub>2</sub>, O<sub>3</sub>, propylene oxide, and SO<sub>2</sub>.

Our portable gas analyzers utilize InterScan's own patented (US Patent Number 4,017,373) electrochemical voltametric sensors.

### Features

- \* An integral sample pump, powered by rechargeable Ni-Cd batteries (supplied), giving up to 10 hours of continuous service
- \* Digital readout of concentration in real time
- \* Audible and visual alarm
- \* Nylon/Cordura carrying case
- \* Plug-in "calculator-type" battery charger
- \* UL Classified Intrinsically Safe models, for use in hazardous locations, Class I, Groups A, B, C, and D (10X0), are available. Please consult factory.
- \* Analog output (0-100 mV full scale)
- \* CE Approved models available, please consult factory.

### Options

- \* Special ranges
- \* Special packaging

### Additional Specs

#### Resolution

0-1999 ppm range	1 ppm
0-1000 ppm range	1 ppm
0-500.0 ppm range	0.1 ppm
0-199.9 ppm range	0.1 ppm
0-50.0 ppm range	0.1 ppm
0-19.99 ppm range	0.01 ppm
0-5.00 ppm range	0.01 ppm
ppb ranges	1 ppb

Weight: 4.5 lb (2.0 kg)

Dimensions: 7" H x 4" W x 8.875"  
D (178 x 102 x 225 mm)

### Specifications common to all InterScan gas detection instruments

Specification parameters are defined per ANSI/ISA—51.1—1979 (R1993). Performance of a particular model may vary from these specifications, and may also be influenced by environmental factors. For further data, please consult the factory.

Accuracy: Analog units:  $\pm 2.0\%$  of full scale  
Digital units:  $\pm 2.0\%$  of reading,  $\pm 1$  least significant digit  
(Limited to accuracy of calibration standard)

Repeatability:  $\pm 0.5\%$  of full scale  
Minimum Detectability: 1.0% of full scale  
Linearity:  $\pm 1.0\%$  of full scale  
Zero Drift:  $\pm 1.0\%$  of full scale (24 hours)  
Span Drift: Less than  $\pm 2.0\%$  of full scale (24 hours)

(The zero and span drift specifications assume that the analyzer is equilibrated, and is at constant temperature, with a properly maintained sensor.)  
"Drift" is defined as an undesired change in output over a period of time, which change is unrelated to input, operating conditions, or load.

Lag Time: Less than 1 second  
Calibration: Against standard gas mixture  
Compliance with: Compliant.  
EC Directives on RoHS and WEEE:



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Range Table and Ordering Information for 4000 Series Portable Gas Analyzers

GAS	MODEL NO. *	STANDARD MEASURING RANGES (ppm unless indicated)
Br2 bromine	4700-19.99m 4700-1999b	0-19.99 0-1999 ppb
CO carbon monoxide	4140-1999m 4140-500.0m 4140-199.9m 4140-50.0m	0-1999 0-500.0 0-199.9 0-50.0
Cl2 chlorine	4340-19.99m 4340-5.00m 4340-1999b	0-19.99 0-5.00 0-1999 ppb
ClO2 chlorine dioxide	4330-19.99m 4330-1999b 4330-1000b	0-19.99 0-1999 ppb 0-1000 ppb
C2H4 ethylene	4070-1999m 4070-500.0m 4070-199.9m 4070-19.99m 4070-1999b	0-1999 0-500.0 0-199.9 0-19.99 0-1999 ppb
EtO ethylene oxide	4200-50.0m 4200-19.99m 4200-1999b 4200-1000b	0-50.0 0-19.99 0-1999 ppb 0-1000 ppb
HCHO formaldehyde	4160-19.99m 4160-5.00m 4160-1999b 4160-1000b	0-19.99 0-5.00 0-1999 ppb 0-1000 ppb
H2NNH2 CH3NHNH2 (CH3)2NNH2 hydrazine(s)	4180-1999b 4180-1000b 4180-500b 4180-100b 4183UL $\times$ 4186UL $\times$ 4187UL $\times$ 4189UL $\times$	0-1999 ppb 0-1000 ppb 0-500 ppb 0-100 ppb 0-0.5/0-2 0-2/0-10 0-100/0-2000 ppb 0-100/0-1000 ppb
H2 hydrogen	4020-1999m 4020-199.9m	0-1999 0-199.9
HBr hydrogen bromide	4800-19.99m 4800-1999b	0-19.99 0-1999 ppb
HCl hydrogen chloride	4360-19.99m 4360-1999b	0-19.99 0-1999 ppb

GAS	MODEL NO. *	STANDARD MEASURING RANGES (ppm unless indicated)
HCN hydrogen cyanide	4280-199.9m 4280-19.99m 4280-1999b	0-199.9 0-19.99 0-1999 ppb
H2O2 hydrogen peroxide	4090-1000m 4090-199.9m 4090-50.0m 4090-5.00m 4090-1999b 4090-1000b	0-1000 0-199.9 0-50.0 0-5.00 0-1999 ppb 0-1000 ppb
H2S hydrogen sulfide	4170-50.0m 4170-19.99m 4170-1999b 4170-1000b 4170-500b	0-50.0 0-19.99 0-1999 ppb 0-1000 ppb 0-500 ppb
NO nitric oxide	4540-199.9m 4540-19.99m 4540-1999b	0-199.9 0-19.99 0-1999 ppb
NO2 nitrogen dioxide Also known as N2O4 nitrogen tetroxide	4150-199.9m 4150-19.99m 4150-1999b 4152UL $\times$ 4154UL $\times$	0-199.9 0-19.99 0-1999 ppb 0-2/10 0-10/0-50
O3 ozone	4480-19.99m 4480-1999b	0-19.99 0-1999 ppb
PrO propylene oxide	4320-199.9m 4320-19.99m 4320-1999b	0-199.9 0-19.99 0-1999 ppb
SO2 sulfur dioxide	4240-50.0m 4240-19.99m 4240-1999b	0-50.0 0-19.99 0-1999 ppb

\* These are the new model numbers. Certain other sources may not reflect this system, while the changeover is occurring. If in doubt, specify the gas and the measuring range desired.

There is not a separate analyzer available for each of these compounds, and the sensor does not respond equally to all hydrazine species. The analyzer must be calibrated with the specific hydrazine compound of interest.

$\times$  Indicates the analog meter UL classified intrinsically safe version, which must be ordered in most hypergol monitoring applications.

Special ranges are available on request.

