

# SPECTRUM SP Series

WITH INTEGRAL PUMP FOR IMPROVED MONITORING PERFORMANCE

## FEATURES

- Built-in pump
- Compact design
- Backlit digital display
- "Intelli-Cal" calibration procedure
- Dual-level alarms
- Password-protected maintenance functions
- Audio and visual alarms
- Low-battery alarm



## SPECIFICATIONS

<b>Size:</b>	5 x 4.75 x 2 inches (127 x 120 x 50 mm)
<b>Weight:</b>	13 ounces (370g)
<b>Enclosure:</b>	ABS plastic
<b>Power:</b>	Rechargeable 4.8V NiMH battery
<b>Display:</b>	8 Character, high contrast dot matrix LCD with backlight
<b>Sensor:</b>	Electrochemical
<b>Alarm Points:</b>	Two (high/low), audio & visual
<b>Audible Alarm:</b>	75 dB at 10 cm, confidence chirp every 30 seconds
<b>Visual Alarm:</b>	Red LED
<b>Temp. Range:</b>	14 to 113° F (-10 to +45° C)

Gas detectors are designed for monitoring the environment by one of two methods, diffusion or sample draw. In the case of diffusion, natural forces are relied upon to cause the ambient air to interact with the gas sensor. As an alternative, the air sample can be drawn to the sensor using either a hand-operated, squeeze-bulb aspirator or a motorized sample pump. Obviously, the motorized pump is much more convenient and easier to use, and it can provide a continuous air sample to the sensor at a constant flow rate.

Sample draw reduces gas response time compared to natural diffusion, and it facilitates testing of valves, pipe connections, etc. for leaks, and enables the monitoring of remote areas or enclosed vessels where non-ambient conditions may exist, such as, temperature extremes.

A **properly designed** sample draw system can improve the monitoring performance for most gases, particularly acid gases like  $\text{Cl}_2$  and  $\text{HCl}$ . It also reduces the response times for gases to be detected at sub-ppm concentrations, such as,  $\text{AsH}_3$ . And, most important, sample draw is required for the detection of some gases, most notably,  $\text{HF}$  and  $\text{O}_3$ . It is for these reasons that the SPECTRUM SP Series was developed.



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## ORDERING INFORMATION

### Instrument (includes charger and manual) Part Numbers & Specifications

Part No.	Gas Detected	Range	LDL (1)	Alarm 1 (2)	Alarm 2 (3)	Life (4)	Cal/Test
04818-0100	Chlorine, Cl <sub>2</sub>	10.0 ppm	0.5 ppm	1 ppm	5 ppm	1-2 years	5
04818-0200	Hydrogen sulfide, H <sub>2</sub> S	200 ppm	5 ppm	10 ppm	25 ppm	2-3 years	5
04818-0400	Hydrogen chloride, HCl	20.0 ppm	1 ppm	5 ppm	10 ppm	1 year	5
04818-0500	Sulfur dioxide, SO <sub>2</sub>	20.0 ppm	1 ppm	5 ppm	10 ppm	2-3 year	5
04818-0700	Hydrogen fluoride, HF	10.0 ppm	1 ppm	3 ppm	6 ppm	1 year	6
04818-0800	Ozone, O <sub>3</sub>	0.99 ppm	0.05 ppm	0.10 ppm	0.20 ppm	1 year	7
04818-1200	Carbon monoxide, CO	1000 ppm	5 ppm	35 ppm	200 ppm	2-3 years	5
04818-1500	Hydrogen, H <sub>2</sub>	1000 ppm	30 ppm	200 ppm	750 ppm	2-3 years	5
04818-1700	Nitrogen dioxide, NO <sub>2</sub>	10.0 ppm	1.5 ppm	3 ppm	5 ppm	1-2 years	5
04818-1750	Nitric oxide, NO	100 ppm	5 ppm	25 ppm	50 ppm	1-2 years	5
04818-2400	Ammonia, NH <sub>3</sub>	100 ppm	7 ppm	25 ppm	50 ppm	1 year	5
04818-4001	Arsine, AsH <sub>3</sub>	0.99 ppm	0.05 ppm	0.05 ppm	0.10 ppm	1 year	5
04818-4003	Silane, SiH <sub>4</sub>	30 ppm	4 ppm	5 ppm	10 ppm	1 year	5

(1) Lower Detectable Limit calculated from baseline noise level, thermal drift and interference data used to derive zero point deviation estimates

(2) Alarm adjustable, audio alarm acknowledgeable (can be silenced)

(3) Audio alarm reactivation, not acknowledgeable (cannot be silenced)

(4) Typical sensor life

(5) Gas cylinder and regulator available for calibration

(6) See HF permeation tube test kit below

(7) See O<sub>3</sub> generator test kit below

## CALIBRATION / TEST EQUIPMENT, REPLACEMENT PARTS & ACCESSORIES\*

Description	Part No.	Description	Part No.
HF Perm Tube Test Kit, with manual	04567-0702	Case, Gas Reg. and up to two 17 or 34L cyl.	73083-000
O <sub>3</sub> Generator Test Kit, 110 Vac, with manual	04056-0800-4	Sampling Probe, 4' tubing w/10" rigid probe	03700-032
O <sub>3</sub> Generator Test Kit, 220 Vac, with manual	04056-0800-5	Battery for SPECTRUM SP, 4.8V. NiMH	67019-027
Gas Reg., flow demand, for 17L cyl.	03510-001	Charger for SPECTRUM SP, 110 Vac	67051-006
Gas Reg., flow demand, for 34L cyl.	03510-002	Charger for SPECTRUM SP, 220 Vac	67051-010
Connector Tube, for Gas Reg./Sampling Probe	03700-033	Manual for SPECTRUM SP	80012-018

\*See product price list for ordering information on calibration gas cylinders, related equipment and replacement sensors



Ozone Generator  
Test Kit Accessories not shown



34 and 17 liter Calibration Gas  
Cylinders, Regulators  
and Connector Tube



HF Permeation  
Test Kit

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

