

GAS LEAK CHECKER

SP-220 Series

The model SP-220 is RKI's latest product offering for leak detection of combustible, toxic, freon and fumigation gases. The SP-220's rugged, light weight design and fast response time plus ease of operation will make pinpointing hard-to-find, low concentration gas leaks a simple procedure.

The SP-220 type SC version uses a hot-wire semiconductor sensor (MOS) that can detect a range of target gases including PH3, CH4, H2, HCL, ETO, HBr and NH3. The SP-220 type FUM version also uses the same MOS sensor and can detect fumigation gases including methyl bromide, sulfuryl fluoride and phosphine.

An integral pump, LCD display with backlight, molded rubber cover, LED light and weather protection (IP-55 rating) are some of the unique features of the SP-220. Snap logging (128 readings) and data-logging (256 data points) features allow for accurate record keeping and testing accountability. The SP-220 also has the ability to zero out background gas to help identify if you are getting closer to a leak source.

Features

- Over 40 target gases to choose from
- Sensitivity and gas range automatically change based on selected target gas
- Compact, rugged, and easy to grip - weighs only 7.5 ounces
- Impact resistant rubber boot
- Easy to read LCD display includes: gas name, gas reading (digitally and graphically), operational indicators like battery, pump, pilot, and sound
- Resistant to silicone poisoning
- Silence gas alarms for discrete leak checking
- Snap logging records and saves to up to 128 readings
- Available with data logging function
- Built-in LED lighting for dark and confined spaces
- IP-55 Water-resistant / dust-proof design
- Continuous operation over 12 hours with 2 AA batteries
- Visual LED, vibration, and audible alarm types

Applications

- Compressed gas cylinders
- Gas cabinets
- Pipes and joints
- A/C unit freon leaks
- Hazmat teams
- Fire services



Specifications	
Model	SP-220 TYPE FUM (Fumigation) SP-220 TYPE SC (Toxic, Combustible, CFC)
Target gas	Refer to the gas list
Detection principle	Hot-wire semiconductor method (MOS)
Sensor	SH-8662
Measuring range	Depends on target gas
Accuracy	Displays 0.1 ppm-bar when 0.3 ppm PH3 applied.
ALARM	Alarm set point Gas alarm : Gas concentration reached or over the setting point. Trouble alarm: Sensor connection / breaking, Low battery, Low flow Circuit error, Calibration error
	Alarm pattern Gas alarm : Flashing LED, Buzzer Trouble alarm: Flashing LED, Buzzer, Display of error message
	Alarm method Non-latching
	Display of alarm Gas alarm : Flashing LED, Buzzer Trouble alarm: Flashing LED, Buzzer, Display of error message
Sampling method	Sample draw
Response time	10 sec.: Time to reach 0.1 ppm when 0.3 ppm PH3 applied
Output signal	IrDA
Control buttons	[AIR] [MODE] [POWER]

Display device	LCD
Display contents	Gas name, Gas concentration, Time, Battery, Pilot indicator, Pump display indicator, Sound
Power source	2 AA Alkaline batteries
Continuous operation	Greater than 12 hours
Operating temp. & humidity	-20~+55 °C (-4 °F~+131 °F), 0~95%RH(Non-condensing)
Dimension & weight	7.87"(H) x 1.69"(D) x 1.85"(W) (Tapered nozzle not included), 7.5oz
Ingress rating	IP-55
Function	Manual LCD backlight (Automatically ON when alarming), Peak value, Snap logging, Time, Cal alarm
Standard accessories	Hand strap, Rubber cover, Tapered nozzle

SP-220 (TYPE SC) GAS LIST				
Gas name	Display	Conc. Display 1 (ppm)	Conc. Display 2 (ppm)	
1,2- Dichloroethane	EDC	1	10	
2,3,3,3-Tetrafluoropropene	CH2C2F4	10	30	
Acetone	C3H6O	1	10	
Ammonia	NH3	10	-	
Arsine	AsH3	0.2	-	
Benzene	C6H6	0.5	10	
Carbon monoxide	CO	10	30	
FREONS	CFC R-134a	R-134a	50	250
	CFC R-22	R-22	10	50
	CFC R-32	R-32	10	50
	CFC R-404A	R-404A	10	50
	CFC R-407C	R-407C	10	-
CFC R-410A	R-410A	10	50	
Diborane	B2H6	0.1	-	
Ethanol	C2H5OH	1	10	
Ethylene	C2H4	1	10	
Ethylene oxide	ETO	1	10	
Formaldehyde	HCHO	10	50	
Germane	GeH4	0.2	-	
Hydrogen	H2	1	10	
Hydrogen bromide	HBr	10	-	
Hydrogen chloride	HCL	10	-	
Hydrogen selenide	H2Se	0.5	-	
Hydrogen sulfide	H2S	0.1	-	
Isobutane	i-C4H10	1	10	
Isopropyl alcohol	IPA	1	10	
Methane	CH4	1	20	
Methanol	CH3OH	1	10	
Methyl bromide	CH3Br	1	20	
Methyl chloride	CH3CL	1	10	
Methyl ethyl ketone	MEK	1	10	
n-hexane	n-C6H14	10	50	
Phosphine	PH3	0.1	2	
Propane	C3H8	1	10	
Silane	SiH4	0.5	-	
Sulfur dioxide	SO2	1	-	
Toluene	C7H8	1	10	
Trichloroethylene	C2HCL3	10	-	
Vinyl chloride	VCM	1	-	
Xylene	C8H10	1	10	

SP-220 (TYPE SC) GAS LIST				
Gas name	Display	Display 1 (ppm)	Display 2 (ppm)	Display 3 (ppm)
Carbon disulfide	CS2	0.1	-	-
Ethylene dibromide	C2H4Br2	1	10	30
Hydrogen cyanide	HCN	1	-	-
Methyl bromide	CH3Br	1	20	100
Methyl iodide	CH3I	1	10	30
Phosphine	PH3	0.1	2	4.5
Sulfuryl fluoride	SO2F2	-	-	800

(-) means that there is response but no tested value

