

# Portable Pump-Suction Gas Detector

### At Safewill, we always put your safety first

Safewill ES20C is the smart, simple, economical way to compliance. Workers feel safe and incidents are minimized so everyone will be able to do more. That means savings realized from business continuity and productivity. The most user-friendly, reliable and cost-effective way to ensure safety, compliance and productivity.

- · Minimize costs and training with five-button operation
- · Pump-priming sampling technology can obtain accurate sampling results
- · Compact, comfortable, portable, be sturdy and durable

#### **ES20C Product Description**

ES20C is a self-developed portable pumping gas detector, aluminum alloy shell, excellent performance and various indicators, using original imported sensors and low-power ARM processor; independent high-precision imported ADC analog-to-digital conversion chip, unique signal processing algorithm, accurate and stable measurement results; 2.5-inch LCD dot matrix display, readings are intuitive and generous;





- 1 【Up】 Up Key
- 2 【Down】 Down Key
- 3 [Left] Switch Machine And Shift Key
- 4 【Right】
  Return Key/Unit Conversion
- 5 【M/OK】
  Menu/Confirm Setting

#### FEATURES & BENEFITS

- Built-in high-performance pump, flow stability, can open may be shut
- Built-in storage, can store 100,000 sets of data
- Restore factory settings to prevent misoperation.
- Automated self-test of battery, sensor and electronics
- 2600mAh large capacity lithium battery, continuous work time more than 20 hours
- %VOL, %LEL, mg/m3, ppm, pph, ppb Various units are available
- Chinese and English are supported as standard, and other languages can be customized.
- Compact, lightweight design with five-button operation
- Intelligent algorithm, multi-point calibration and temperature compensation, more accurate measurement results
- Acousto-optic alarm, timely alarm when the concentration exceeds the standard is detected
- · Affordable, with low cost of ownership

# Safewill ES20C Technical Specification

TECHNICAL SPECIFICATIONS		
SIZE	200.5x64.8x35.5mm (LxWxH)	
WEIGHT	12.69oz/360g	
TEMPERATURE RANGE	-20 to 50℃ (special requirements need to be customized)	
HUMIDITY RANGE	10-95%RH(no condensation)	
PRESSURE RANGE	86-106 Kpa	
SELF-TEST	Audible/Visual alarms on activation, Sensors, Battery, Circuitry	
ALARMS AND TYPE	Visual,Vibrating,Audible;Low,High,TWA, STEL,OL(over limit),Low Battery	
DETECTION MODE	Pump suction type	
DETECTION PRINCIPLE	Catalytic combustion, infrared detection, electrochemistry, photoionization, PID, thermal conductivity	
BATTERY CAPACITY	2600mAh Large capacity lithium battery	
ACCURACY	≤±3%F.S	
RESPONSE TIME	T90<30S	
WORKING HOURS	> 12 hours (at room temperature, no alarm)	
CHARGING TIME	≤6 hours	
CERTIFICATIONSAND APPROVALS	CE F© SIL RoHS  ATEX: II 2G Ex ib IIB T3 Gb  Tamb: -20 to 50°C  Support customization	
WARRANTY	One year warranty	
	(1)	

GASES	STANDARD MEASURING RANGE	RESOLUTION
Carbon Monoxide(CO)	0-100/500ppm	1ppm
Hydrogen Sulfide(H2S)	0-100/1000ppm	1ppm
Ammonia(NH3)	0-20/100/1000ppm	0.1/1ppm
Ozone(O3)	0-1/10/100ppm	0.1/1ppm
Oxygen(O2)	0-30%VOL	1%VOL
Sulfur Dioxide(SO2)	0-20/2000ppm	1ppm
Methane(CH4)	0-100%VOL	1%VOL
Formaldehyde(CH2O)	0-10/50ppm	1ppm
Nitric Oxide(NO)	0-250/2000ppm	1ppm
Nitrogen Dioxide(NO2)	0-20/2000ppm	1ppm
Hydrogen Chloride(HCL)	0-50/200ppm	1ppm
Hydrogen(H2)	0-1000/40000ppm	1ppm
Chlorine Dioxide(CLO2)	0-1/50ppm	0.1/1ppm

<sup>\*</sup> The above gas selection table is only a partial display, if you need a detailed gas selection table, please contact us.

#### Product use environment:

Can be applied to various dangerous industrial places; Products are widely used in metallurgy, petroleum and petrochemical, municipal, chemical, bio-pharmaceutical, home environmental protection, school laboratories, animal husbandry and other fields.

### APPLICATION SCENARIOS



Petrochemical Industry



Biopharmaceutical



Animal Husbandry



Metallurgical

<sup>\*</sup> Alarm setpoints for all sensors are user adjustable. Setpoint are automatically displayed during instrument start-up.