



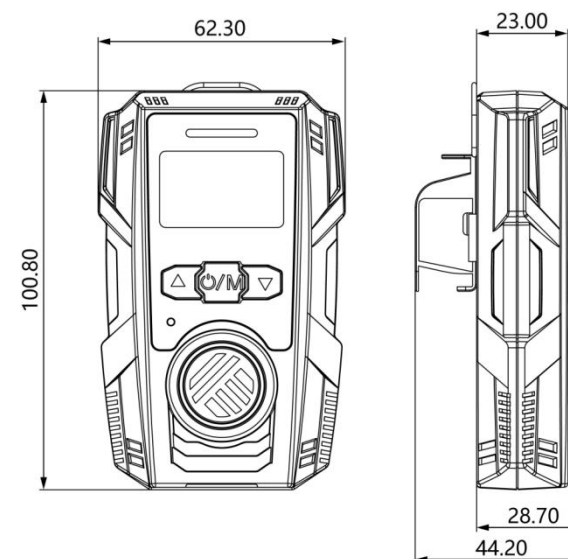
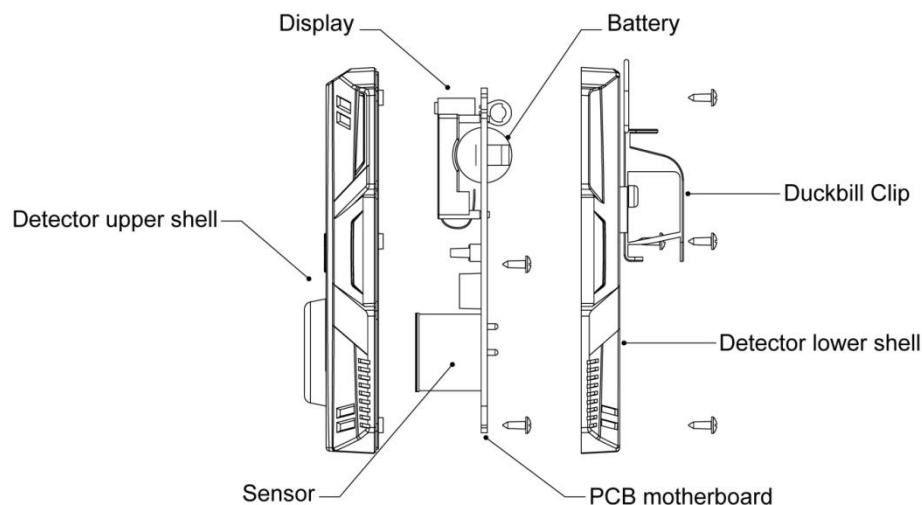
Portable Toxic Single Gas Detector ES20D

Functional Features

1. Based on ARM architecture with a 32-bit core processor, real-time operating system, and advanced algorithms to ensure accurate and fast response.;
2. Capable of recording nearly 500 alarm events continuously;
3. Supporting Bluetooth transmission for exporting historical data, configuring parameters, and connecting to mobile apps;
4. Utilizing a 14335 lithium battery with standard voltage of 3.6V and standard capacity of 1650mAh;
5. Battery life lasts for over 1 year (based on 8 hours of daily operation without alarms);
6. Equipped with high-performance sensors for high sensitivity, short response time, and accurate data collection.;
7. Requiring booting in clean air, with zero-point self-calibration available and plug-in sensors able to be replaced;
8. Featuring a multi-point temperature compensation unit for high accuracy;
9. Sensor lifespan monitoring with alarm prompts starting when remaining lifespan is 30 days;
10. Performing full functional self-check during startup: screen, sensors, battery level, vibration, and audible and visual alarms;



11. Regular calibration reminders to notify end-users of the need for calibration;
12. Supporting various alarm types including sound, vibration, light, high alarm, low alarm, over-range alarm, TWA, STEL, and battery level alarms.;
13. Normal operating interface displaying gas concentration values, units, bluetooth status, and battery level;
14. Supporting monitoring of over 20 different gases;
15. Utilizing a diffusion sampling method and ships with calibration caps; able to be connected to an external pump;
16. Compact size, lightweight, with stainless steel back clip for convenient portability;
17. IP54 protection rating allowing for use in various complex environments; explosion-proof design;
18. Operating environment ranges from -30°C to 50°C;





Detectable Gases

Gas type	Molecular formula	Range	Resolution	Operation temperature
Hydrogen	H ₂ S	0-1000ppm	1ppm	-30°C~50°C
Carbon monoxide	CO	0-2000ppm	1ppm	-30°C~50°C
Oxygen	O ₂	0-30%VOL	0.2%VOL	-30°C~50°C
Chlorine	CL ₂	0-200ppm	0.1ppm	-30°C~50°C
Hydrogen	H ₂	0-1000ppm	1ppm	-30°C~50°C
Ammonia	NH ₃	0-1000ppm	1ppm	-30°C~50°C
Nitric oxide	NO	0-20ppm	1ppm	-30°C~50°C
Nitrogen dioxide	NO ₂	0-100ppm	0.1ppm	-30°C~50°C
Ozone	O ₃	0-10ppm	0.02ppm	-30°C~50°C
Chlorine dioxide	CLO ₂	0-1ppm	0.01ppm	-30°C~50°C
Ethylene oxide	ETO	0-100ppm	0.1ppm	-30°C~50°C
Hydrogen cyanide	HCN	0-100ppm	0.1ppm	-30°C~50°C
Phosphine	PH ₃	0-20ppm	0.1ppm	-30°C~50°C
Formaldehyde	CH ₂ O	0-10ppm	0.05ppm	-30°C~50°C
Methylmercaptan	CH ₃ SH	0-10ppm	0.1ppm	-30°C~50°C



Product Technical Specifications

Model	ES20D
Display method	LCD digital display
Detection principle	Electrochemical Detection
Power Supply	3.6V 1650mAh 14355 lithium battery
Working current	< 200uA
Continuous working hours	≥ 1 year
Communication methods	Bluetooth (optional)
Gas type	O2, CO, H2S, H2, SO2, NH3, NO2, etc.
Accuracy	<3%FS
Preheating time	<90S
Response time	T90<30S
Repeatability	<2%
Zero drift	<1%
Alarm method	Sound, light, and vibration alarm
Weight	100g
Protection level	IP54
Temperature	-30℃~50℃
Humidity	10-95%RH
Atmospheric pressure	86-106kPa