Portable Biogas Analyzer: Multi-Gas Detection System

Model **MSSKY8000-X-M4SWISS** | Brand **Master Science**



Biogas Analyzer

Are you struggling to obtain accurate, on-the-spot readings of biogas composition in challenging field or lab environments? Tired of bulky equipment, slow sensor response, and data that's difficult to capture and export? The MSSKY8000-X-M4SWISS Portable Biogas Analyzer is the definitive solution for researchers and technicians who demand reliable, real-time gas analysis.

KEY HIGHLIGHTS

- Flexible Data Output for Seamless Workflow Integration
- Additional Information

AT A GLANCE

0-100% VOL; CO2: 0-100% VOL; H2S: 0-5000 ppm; O2: 0-25% VOL.
MEASUREMENT RANGECH4

Request a Quotation
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Overview

This advanced, rugged portable biogas analyzer is engineered to deliver precise measurements of methane (CH4), carbon dioxide (CO2), hydrogen sulfide (H2S), and oxygen (O2) with laboratory-grade confidence in a compact, go-anywhere package. Designed for applications from anaerobic digestion monitoring to environmental research, this multi-gas analyzer transforms complex gas analysis into a streamlined, efficient process, giving you immediate insights to optimize processes and ensure safety.

For professionals who require dependable data beyond the four walls of a traditional lab, the Portable Biogas Analyzer: Multi-Gas Detection System is the essential tool for modern gas analysis.

Multi-Gas Detection System delivers tangible advantages that improve accuracy, boost productivity, and ensure safety.

Powered by a large 5200mAh lithium battery, this portable biogas analyzer offers exceptional operational longevity. You can rely on over 32 hours of continuous operation on a single charge for single-gas monitoring, ensuring it lasts through the longest field campaigns or monitoring shifts without interruption.

The 3.5-inch color LCD displays real-time numerical values and trend charts simultaneously, making it easy to interpret data on the fly. This user-friendly interface of the biogas analyzer minimizes training time and helps operators quickly identify trends or issues.

The integrated multi-layer filtration system protects the sensitive infrared and electrochemical sensors from oil, water vapor, and dust. This critical feature of the field-ready portable gas analyzer ensures consistent accuracy, reduces maintenance costs, and extends the overall life of the instrument.

With optional RS485, USB, Bluetooth, and Wi-Fi connectivity, this device fits into any data ecosystem. The optional built-in or Bluetooth printer provides immediate hardcopy reports, making our versatile multi-parameter gas analyzer an indispensable tool for both solo field work and integrated monitoring systems.

Key Benefits

BUILT-IN PROTECTION FOR SENSOR LONGEVITY AND ACCURACY

Flexible Data Output for Seamless Workflow Integration

Additional Information

Obtaining reliable gas data in real-world conditions is fraught with obstacles. The MSSKY8000-X-M4SWISS Portable Biogas Analyzer is specifically designed to overcome the most common pain points faced by researchers and engineers. The MSSKY8000-X-M4SWISS Portable Biogas Analyzer is defined by precision engineering. Below is a clear, detailed listing of its performance metrics and capabilities.

Technical Specifications

PARAMETER	SPECIFICATION
Portable Biogas AnalyzerMulti-Gas Detection System	
Measurement RangeCH4	**0-100% VOL; CO2: 0-100% VOL; H2S: 0-5000 ppm; O2: 0-25% VOL.**
ResolutionCH4	0.01% VOL; CO2: 0.01% VOL; H2S: 1 ppm; O2: 0.1% VOL.
Precision±5% F.S. (Higher precision customization available).	
Sampling MethodBuilt-in pump with adjustable flow rate (500 mL/min standard).	
Display3.5-inch high-definition color LCD (320 x 480 pixels).	
ChargingStandard Micro-USB port (9V/2A charger included).	
Environmental RatingIP66 (dust-tight, protected against powerful water jets).	
Operating Temperature-40°C to +70°C.	
Operating Humidity0 to 95% RH (non-condensing).	
Eliminate Tedious, Error-Prone Manual SamplingTraditional methods requiring off-site lab analysis cause delays and risk sample degradation. This biogas analyzer features a built-in sampling pump for instant, direct analysis, delivering results in seconds right at the source and eliminating guesswork.	
Conquer Harsh and Variable EnvironmentsField conditions can ruin sensitive instruments. With an operating temperature range of -40°C to +70°C, IP66 ingress protection, and optional high-humidity filters, this rugged portable gas analyzer is built to perform reliably in demanding conditions from cold digesters to hot composting sites.	
Simplify Data Management and Compliance ReportingManually transcribing data is inefficient and risky. The integrated 32GB SD card and USB export function automatically log all measurements with timestamps, creating an audit trail for easy reporting, trend analysis, and regulatory compliance.	
Gain Comprehensive Process InsightsUnderstanding just one gas parameter isn't enough. The ability to monitor up to four critical biogas components (CH4, CO2, H2S, O2) simultaneously with one compact biogas analyzer provides a complete picture of gas production quality, process efficiency, and potential corrosion risks.	
Detected GasesMethane (CH4), Carbon Dioxide (CO2), Hydrogen Sulfide (H2S), Oxygen (O2).	
Detection PrincipleNon-Dispersive Infrared (NDIR) for CH4 and CO2; Electrochemical for H2S and O2.	
Data StorageStandard 32GB SD card for automatic data logging with customizable intervals.	
Battery & Operation Time5200mAh rechargeable Li-ion; >32 hours (single gas), >24 hours (multi-gas).	

Optional Accessories

- USB, RS485, Bluetooth, Wi-Fi (outdoor range <500m), LoRa.
- Supports internal thermal printer or external Bluetooth printer.
- Dimensions: 260 mm (H) x 230 mm (W) x 120 mm (D).
- Weight: 3.7 kg.