MIR 9000P

envea

Portable multi-gas analyzer

Save time all along your stack emission testing process

8 **SIMULTANEOUS PARAMETERS**

NO_x, SO_2, CO, CO_2, CH_4, N_2O, O_2 and residual H_2O

Accuracy and extended measuring ranges

Compliant with international directives & regulations

EN 15267-4
Meets the highest European & U.S.standards for Portable-Automated Measuring Systems

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THE MIR 9000P

*belongs to the new generation of ENVEA gas monitors, showcasing eco-design, IoTs and on-board intelligence. It measures simultaneously 8 gases and uses the non-dispersive infrared method with gas filter correlation (**NDIR-GFC**). O_2 is measured by a SRM built-in **paramagnetic** sensor.*

The analyzer has been designed to meet the specific needs of on-site regulatory measurement providing superior mobility, robustness, accuracy and compliance.
All this makes up for a unique gas emission monitor offering high productivity and low operational cost.

INCREASED MOBILITY & PRODUCTIVITY

- All-in-one case design for easy transport/storage
- Lightweight, compact and extra resistant transport case

D H L

L 641 mm
H 393 mm
D 209 mm

KG 15 kg 33 lbs

30 MIN AUTONOMY (option)

- The analyzer operational temperature can be maintained:
  - in between stack controls (optional battery unit)
  - in transport, through the 12 V car plug (adaptor not provided)
- Standby mode guarantees the instrument is operational at any time

✓ **Maximizes the number of stacks tested**

ROBUST DESIGN

- Built-in vibration absorber ensures measurement cell protection and stability
- Extended operating temperature ranges
- High protection (IP 44) against water splashing from any direction

✓ **Whatever the weather, it operates!**

40°C

IP44

STAY CONNECTED & GET ON WITH OTHER TASKS

- Remote access to full operation thanks to ENVEA Connect™ App and proprietary WiFi
- Smartphone alerts and notifications
- IoT ready: software update, TCP/IP access...

Operates case closed or open

FREE APP

GET IT ON Google Play

Available on the App Store

PLUG &PLAY

QUICK INSTALLATION

- Warm-up time: 30 min maximum
- Robust gas connectors
- Self-adaptive measuring scales
- Compatible with most sampling systems on the market

ONE CLICK OPERATIONS

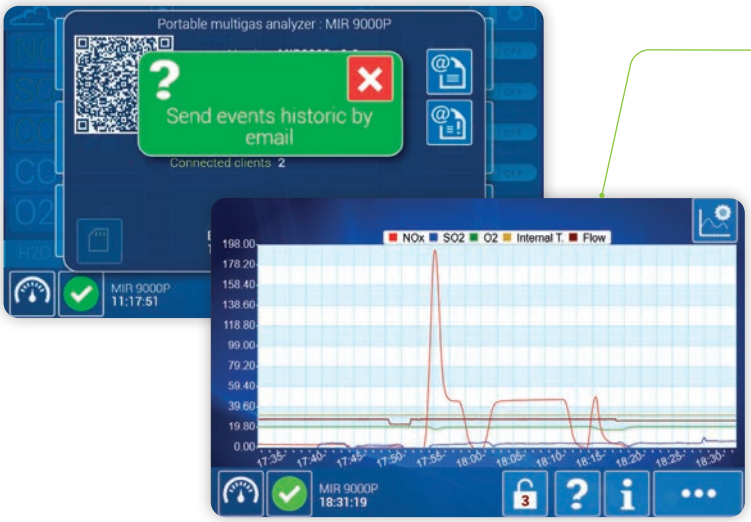
- Integrated user guidance and shortcuts to key functions: calibrations, span check, zero, etc.
- Synoptic with real-time status
- Secured user management

ANALYZER STATUS AT A GLANCE

- Front side indicator provides key status info to the user

✓ **No more comings & goings to open the lid and check on the analyzer**

PREPARE REPORT ELEMENTS WHILE ON SITE



- Direct access to real-time and stored data; time frame selection to generate graphs
- Screenshot function for quick integration into reports
- Redundant and secured data back-up
- All data can be saved on USB memory stick

MAXIMIZED
UPTIME OF THE ANALYZER

- Modular design and Plug & Play parts (O_2 probe, NOx converter, protection filter, etc.)
- Share the analyzer's state of health and get remote diagnosis & support

PLUG &PLAY @

- Turn-up lid designed for quick access to operational modules and easy maintenance

SYSTEM & ACCESSORIES

MIR 9000P

Gas conditioning unit

TECHNICAL SPECIFICATIONS

Measured gases		SO_2, NO or NOx, CO, CO_2, N_2O, CH_4, O_2 and residual H_2O	
Measuring units (programmable)		ppm, mg/m³ or % vol.	
Parameters		**Typical measuring ranges**	
SO_2		0-141/1410/8500 mg/Nm³	0-50/500/3000 ppm
NOx as NO (after NOx converter)		0-70/2000/3300 mg/Nm³	0-50/1500/2500 ppm
NO_x as NO_2 (after NOx converter)		0-110/3000/5000 mg/Nm³	
CO		0-60/3000/8000 mg/Nm³	0-50/2400/6500 ppm
CO_2		0-20/30% vol.	
N_2O		0-1000 mg/Nm³	0-500 ppm
CH_4		0-70/700 mg/Nm³	0-100/1000 ppm (higher range upon request)
O_2		0-10/25% vol. Measured by a built-in paramagnetic sensor	
Residual H_2O		0-2% vol.	
Repeatability		±2%	
Zero drift		±2% / 30 days	
Span drift		±2% / 30 days	
Linearity		±1% of Full Scale	
Resolution		< 0.1 ppm (CO_2: < 0.1%)	
Response time		1 minute as standard, programmable	
Dimensions (L x H x D)		641 x 393 x 209 mm	
Weight		15 kg / 33 lbs	
Protection class		IP 44 (case closed)	
Operating temperature		+5 to +40°C	
Power supply		100-250VAC, 50/60Hz + ground	
Energy consumption (except accessories)		Preheating: 120 W / 160 VA Measurement: 60 W / 75 VA	
Sample flow-rate		6.66 x 10^{-6} m³/s (0.4 l/min.)	
Display & Control		Color touchscreen, TFT LCD 7'', resolution: 800(RGB) x 4480	
Internal storage of measurement data		1 year for 1 minute data/ 1 month for 5 sec	
Standard I/O		3 x USB ports type A: 2.0 (compatible 3.0) 1 x RJ45 (MODBUS TCP, MODBUS RTU (dongle) UDP Protocol) WiFi (via USB) Analog input: 0-250 mV or 0-1 V	
Connectivity		iOS, Android : via IP address or free ENVEA Connect™ App Computer (via any browser,TCP/IP)	
Options	I/O	• 8 analog outputs (0-1 V, 0-10 V, 0-20 mA, ou 4-20 mA) • 8 analog inputs, 0-2.5 V • 12 digital outputs by dry, potential free, contact relay	
	Battery	Type: AA 2800 mAh (min. 2650 mAh) NiMH 1,2 V x 20	
	System accessories	• Portable gas sample probe electrically heated with calibration gas feeding. • Portable sample conditioning system equipped with high-performance Peltier gas cooler. • Heated sample line with multi-pin plug on-off electronic temperature controller.	

Distributed by

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KNOWLEDGE IN ACTION

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ISO 45001:2018
ISO 14001:2015
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CERTIFICATION

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