

OPTIMAX BIOGAS

The Ultimate, Professional, Handheld Biogas Analyzer

O2 CO2 CH4 H2S CO NOx NO NO2 H2 N2





OPTIMAX BIOGAS

The most versatile handheld biogas analyzer

The OPTIMAX analyzes biogas, measures biogas pressure and temperature, gas flow velocity and flow rate calculations.

OPTIMAX Bio-gas can optionally measure CHP engine exhaust gases.

These are your special advantages:

- Biogas measurement: CH4, CO2, O2, H2S
- Exhaust gas measurement: O2, CO2, CO, NO, NO2
- Ambient air measurement: CH4 (LEL), H2S
- Different measuring units, user definable
- Intuitive navigation menu with function keys
- Fiber glass reinforced enclosure with rear magnets
- Large, internal data memory and interfaces to App and PC software
- Strong Lithium-Ion battery for at least 15 h continuous operation



The device in detail

An overview of special features



Condensate and dirt removal

Large capacity condensate separator with proven pleated filter including water stop function



Operation and color display

Intuitive guidance through all measurement programs, large color display, easy interaction via. keypad



Store, transfer and print measurement data

SD card, Mini-USB, WLAN and Bluetooth for data transfer to Smartphone, Tablet or PC – or infrared speed printer



Practical accessories to carry along

Optionally: transport case, gas sampling probe, MRU speed printer and nylon transport bag



Simultaneous measurement of bio-gas and flow velocity

Measurement of bio- or landfill gas, using special S-type probe, with 2 ... 100 m/s and calculation of the flow rate in m³/h



US LFG probe

For simultaneous biogas extraction, temperature measurement, pressure and flow measurement

OPTIMAX BIOGAS

TECHNICAL SPECIFICATIONS

Measuring components		Measuring method	Measuring range min./ max.	Resolu- tion	Repeatability
CH4	Methane	NDIR	0100%	0.1 %	± 0.3 % or 3 % reading*
CO ₂	Carbon dioxide	NDIR	0100%	0.01 %	± 0.3 % or 3 % reading*
H ₂ S	Hydrogen sulfide	Electro-chemical	0 2,000 ppm / 5,000 ppm	1 ppm	±5 ppm or 5 % (0 500 ppm), 10 % (> 500 ppm) reading
02	Oxygen (Long Life)	Electro-chemical	0 25 %	0.01 %	± 0.2 % absolute
H2	Hydrogen	Electro-chemical	0 1,000 ppm / 2,000 ppm	1 ppm	±5 ppm or 5 % (0 500 ppm), 10 % (> 500 ppm) reading
N2	Nitrogen	Calculated	0100%	0.1 %	
Hu	Calorific value	Calculated	0 36 MJ/m3	0.01 MJ/m3	
со	Carbon monoxide	Electro-chemical	0 10,000 / 20,000 ppm	1 ppm	\pm 10 ppm or 5 % (0 4,000 ppm), 10 % (> 4,000 ppm) reading
NO	Nitric monoxide	Electro-chemical	0 1,000 / 5,000 ppm	1 ppm	±5 ppm or 5 % (0 1,000 ppm), 10 % (> 1,000 ppm) reading
NO ₂	Nitric dioxide	Electro-chemical	0 200 / 1,000 ppm	1 ppm	±5 ppm or 5 % (0 200 ppm), 10 % (> 200 ppm) reading
NOx	Nitrogen oxide	Calculated	0 5,000 ppm	1 ppm	±5 ppm or 5 % (0 1,000 ppm), 10 % (> 1,000 ppm) reading
Gas flow velocity		S-type probe	1 100 m/s	0.1 m/s	\pm 0.2 m/s (2 10 m/s), \pm 0.5 % (> 10 m/s)
Flow rate		Calculated	0.1 6,000 m3/s	0.1 m3/s	user settable cross section area
Differential temperature		NiCrNi	-40 2192 °F (-40 +1,200 °C)	1 °F	± 4 °F (2 °C), 0.5 % reading*
Differential pressure		Piezo	± 120"H2O (300 hPa)	0.01 hPa	± 0.01″H ₂ O (0.03 hPa), 1 % reading*

CEN	EDAL	CDEC	ILICA	TIONS
(45)	IFKAI	SPEC	IFIC A	110145

Operation conditions	41°F 113°F (5 45°C) max. 95 % RH, none condensing
Storage conditions	4°F 122°F (-20°C 50°C)
Data storage	32,000 data sets
Interfaces	SD card reader, USB, IRDA, WLAN, Bluetooth (Bluetooth is not available for LFG version)
Internal power supply	Lithium-lon battery, 15 h operation time
Mains power supply	wall plug unit 100 240 Vac, 50 60 Hz, 5 V DC, 1.2 A
Protection class	IP 30
Dimensions (W x H x D)	4.45" x 8.82" x 2.13" (113 x 244 x 54 mm)
Weight	approx. 1.7 lbs. (750 g)

Tel.: +1 (832) 230-0155 Info@mru-instruments.com www.mru-instruments.com



MRU Instruments, Inc. Humble, TEXAS 77338 USA