



OPTIMAX *BIOGAS*

The Ultimate, Professional,
Handheld Biogas Analyzer

O₂ | CO₂ | CH₄ | H₂S | CO | NO_x | NO | NO₂ | H₂ | N₂



**For fast biogas & emissions analysis at
biogas, bio-methane and landfill sites**



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.	Resolution	Repeatability
CH4	Methane	NDIR	0 ... 100%	0.1 %	± 0.3 % or 3 % reading*
CO2	Carbon dioxide	NDIR	0 ... 100%	0.01 %	± 0.3 % or 3 % reading*
H2S STD	Hydrogen sulfide	Electro-chemical	0 ... 2,000 ppm / 5,000 ppm	1 ppm	± 5 ppm or 5 % (0 ... 500 ppm), 10 % (> 500 ppm) reading*
H2S HIGH	Hydrogen sulfide	Electro-chemical	100 ... 5,000 ppm / 10,000 ppm	1 ppm	± 50 ppm or 5 % reading*
O2	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	0 ... 100%	0.1 %	
Hu	Calorific value	Calculated	0 ... 36 MJ/m3	0.01 MJ/m3	
CO	Carbon monoxide	Electro-chemical	0 ... 10,000 / 20,000 ppm	1 ppm	± 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*
NO2	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	± 0.2 m/s (2 ... 10 m/s), ± 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" H2O (0.03 hPa), 1 % reading*

GENERAL SPECIFICATIONS

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-Ion 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)

Data subject to change without notice. | * which ever is larger | N-12812GB-K0-10-920-SDE



MRU Instruments, Inc.
 Humble, TEXAS 77396 USA
 Tel.: +1 (832) 230-0155
 Info@mru-instruments.com
 www.mru-instruments.com

MRU Representative: