



NOVA^{plus} KFZ

Portable, vehicle exhaust gas analyzer

With Wireless Remote Control Unit

O₂ | CO₂ | CO | NO_x | NO | NO₂ | SO₂ | HC as n-Hexane



NOVA^{plus} KFZ

Portable, vehicle exhaust gas analyzer

This robust, portable, vehicle exhaust gas analyzer utilizes the combination of infrared measurement technology and electrochemical sensors, and is available with either condensate separator or an optional gas cooler.

Simultaneous analysis of up to 7 exhaust gas components:

O₂ | CO₂ | CO | NO_x | NO | NO₂ | SO₂ | HC as n-Hexane

The device in detail

An overview of the special features



Remote Control Unit (RCU)
Slim, lightweight, with bright color 3.5" TFT display, wireless charging



Easy to use interfaces
SD card and Mini USB



High speed printer
built-in, prints graphics as well

We offer you these special advantages:

- Remote Control Unit RCU-comfort is included
- Bosch Smoke Unit (BSU) measurement with optical densitometer
- Gas sampling probe with steel flexible tube, for exhaust gas temperature up to 500°C
- Large condensate separator with PTFE (Teflon) coated PTFE filter
- Strong, high performance gas sampling pump for high suction sampling
- Automatic zeroing using 3/2-Way solenoid valve
- O₂ referencing (normalization) to user definable values
- Hexane measurement with PEF factor storage
- True measurement of NO(x) = NO + NO₂ and NO(x) as mg/m³ NO₂
- Lambda calculation according to Brettschneider formula
- Automatic measurement incl. data logging function
- Built-in speed printer with easy paper loading
- High energy Li-Ion battery, for up to 10 hrs. operation time
- Universal grid power supply, 100-240Vac/50-60Hz / 12V dc
- Docking station for remote control with wireless, inductive charging of remote control unit RCU
- Robust metal enclosure mounted inside aluminum framed case



Gas sampling probe with steel flexible tube, for exhaust gas temperature up to 500°C

Docking station for remote control with wireless, inductive charging of remote control unit RCU

Large condensate separator with PTFE (Teflon) coated PTFE filter

Automatic zeroing using 3/2-Way solenoid valve

Aluminum framed case

Remote control unit

High Speed Printer

Strong, high performance gas sampling pump for high suction sampling

Bosch Smoke Unit (BSU) measurement with optical densitometer

NOVA^{plus} KFZ

TECHNICAL DETAILS

Measurement component	Measuring range	Resolution	Accuracy
O2 Oxygen (Long Life)	0 ... 25%	0.1 %	± 0.2 Vol-% abs.
NO Nitric oxide	0 ... 1,000 / 5,000 ppm *	1 ppm	± 5 ppm or 5 % reading < 1,000 ppm / 10 % reading > 1,000 ppm
NO2 Nitric dioxide	0 ... 200 / 1,000 ppm *	1 ppm	± 5 ppm or 5 % reading up to 200 ppm** or 10 % reading up to 1,000 ppm**
SO2 Sulphur dioxide	0 ... 2,000 / 5,000 ppm *	1 ppm	± 10 ppm or 5 % reading up to 2,000 ppm** or 10 % reading up to 5,000 ppm**

3-gas NDIR bench	Measuring range	Resolution	Accuracy
CO Carbon monoxide	0 ... 2,000 ppm up to 10 %	0.1 %	± 0.03 % or 3 % of the measured value**
CO2 Carbon dioxide	0 ... up to max 40 %	0.1 %	± 0.5 % or 3 % of the measured value**
HC as n-Hexane	0 ... 2,000 ppm up to 10,000 ppm	0.1 %	± 30 ppm % or 3 % of the measured value**

OTHER VALUES	
Calculations	Lambda calculation according to Brettschneider formula
O2 referencing	(normalization) to user definable values
n-Hexane measurement	with PEF factor storage
True measurement of NO(x)	NO(x) = NO + NO2 and NO(x) as mg/m3 NO2

GENERAL SPECIFICATIONS	
Max suction range gas pump	140 inH2O (350 hPa)
Typical gas flow	23.8 gal/h (90 l/h)
Gas sampling probe	with steel flexible tube, for exhaust gas temperature up to 932°F (500°C)
Internal memory	16,000 data sets
Data transmission	via USB, SD Card or Bluetooth
Interfaces	SD card reader, USB, Bluetooth
Display	3.5" TFT color display
Operation temperature	41°F ... 113°F (5 ... 45°C) max. 95 % RH, none condensing
Storage temperature	-4°F ... 122°F (-20°C ... 50°C)
Ambient conditions	not in aggressive, corrosive or high dust ambience, not for use in hazardous areas
Battery operated BASE UNIT	Lithium-Ion battery, 20 h operation time (with gas cooler 10 h)
Battery operated RCU	Lithium-Ion battery, 30 h operation time
Grid power supply	100 - 240 V AC / 50 ... 60 Hz 5A
Protection class	IP 30 of base unit / IP 20 of base unit open
Weight	approx. 16.3 lbs.
Dimensions	(W x H x D) 18.5" x 9" x 12" complete unit

Subject to change without notice / * short term overload / ** whichever is larger



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

MRU Representative: