



EMISSION MONITORING SYSTEMS

We *care* about the environment

COMBUSTION EFFICIENCY ANALYZER



YOUR BEST
AND RELIABLE
CHOICE

EASY HANDLING
ROBUST RUBBER
PROTECTION CASE
WITH MAGNET

LOW WEIGHT:
APPR. 500 g



DELTA 65

THIS IS THE IDEAL COMBUSTION
ANALYZER FOR INSTALLATION
AND MAINTENANCE
– ALWAYS DEPENDABLE

O₂

CO₂

CO

NO

SO₂

H₂S

Technical Specifications

DELTA 65	COMBUSTION EFFICIENCY ANALYZER with O₂ and CO electrochemical sensors	
Fuel types	natural gas, liquid gas, oil heavy, oil light, pellets, wood, bio diesel, expandable fuel type list	
Measurement components:	<i>range</i>	<i>accuracy</i>
Oxygen O₂	0 ... 21,0 Vol-% abs.	± 0,2 Vol-% abs.
Carbon monoxide CO (H₂-comp)	0 ... 4.000 ppm * overload up to 10.000 ppm	± 20 ppm or 5 % reading < 4.000 ppm / 10 % reading > 4.000 ppm
Flue gas temperature	0 ... 650 °C (stainless steel tube)	± 2 °C ... < 200 °C / 1 % reading > 200 °C
Differential temperature	up to 650°C	
Ambient air temperature	0 ... 100 °C	± 1 °C
Draft pressure	- 50 ... ± 50 hPa	± 0,02 hPa (mbar)
Differential pressure	± 200 hPa (mbar)	± 0,02 hPa (mbar)
Combustion calculations:	based on the large fuel type list like CO ₂ , excess air, heat losses, combustion efficiency, flue gas dew point, CO/CO ₂ ratio, Poison-index, CO ambient air measurement, Time tightness test, Let by test	
Calculated values:	fuel type depending	
Carbon dioxide CO₂	0 ... 20 %	± 0,3 Vol-% abs.
Heat losses q_A	0 ... 99,9 %	
Efficiency η	0 ... 120 %	
Excess Air λ	1,... 9,99 %	
DELTA 65 INDUSTRIAL	INDUSTRIAL COMBUSTION ANALYZER with one or two electrochemical sensors	
Carbon monoxide CO (H₂-comp)	0 ... 4.000 ppm * overload up to 10.000 ppm	± 20 ppm or 5 % reading < 4.000 ppm / 10 % reading > 4.000 ppm
Carbon monoxide CO high	0 ... 4.000 ppm * overload up to 20.000 ppm	± 100 ppm or 5 % reading < 4.000 ppm / 5 % reading > 4.000 ppm
Nitric monoxide NO	0 ... 1.000 ppm * overload up to 5.000 ppm	± 5 ppm or 5 % reading < 1.000 ppm / 10 % reading > 1.000 ppm
Hydrogen sulfide H₂S	0 ... 500 ppm * overload up to 2.000 ppm	± 10 ppm or 5 % reading < 2.000 ppm / 10 % reading > 2.000 ppm
Sulfur dioxide SO₂	0 ... 2.000 ppm * overload up to 5.000 ppm	± 10 ppm or 5 % reading < 2.000 ppm / 10 % reading > 2.000 ppm
Industrial		
Flue gas temperature	0 ... 1.100 °C (Inconel steel tube)	± 2 °C ... < 200 °C / 1 % reading > 200 °C
General specifications:		
Operation temperature	+ 5 ... + 45 °C, max. 95 % RH, none condensing	
Storage temperature	0 ... + 50 °C	
Ambient conditions	not in aggressive, corrosive or high dust ambience, not for use in hazardous areas	
Power supply	NiMH battery, min. 8 h operation	
Mains	wall-plug grid power supply, 100 - 240 Vac / 50 ... 60 Hz	
Protection class	IP 20	
Approval	TÜV approval, EN 50379 Standard, UNI-norm, CE-conform, ISO 9001:2008	
Weight	approx. 500 g	
Dimensions	(W x H x D) 74 x 145 x 35 mm	
	* for SHORT-TERM measurements only !	

DATA SUBJECT TO CHANGE WITHOUT NOTICE

DELTA 65 – Your best and reliable choice MRU – Always a safe and sustainable decision

Dealer:



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and environmental protection GmbH
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THE NEW GENERATION

DELTA 65

COMBUSTION EFFICIENCY ANALYZER

YOUR BEST AND
RELIABLE CHOICE

The new handheld combustion analyzer with rubber protection case and magnet, optimized condensat trap and reusable filter, for extremely robust and simple use. Easy handling and a wide range of application. This is the ideal combustion analyzer for installation and maintenance.

Main features:

- Smallest instrument with ergonomic design
- Modern design, rugged rubber protection case with fixing magnet
- Optimized condensate trap with reusable star filter (PTFE)
- Well legible, backlit LCD display (4 lines)
- Mini USB interface for cable data transfer to PC and internal battery charging
- Data storage up to 100 measurements
- Integrated rechargeable batteries (NiMH) for min. 8 hours operation
- Universal USB battery charger for 100 ... 240 Vac grid power
- Infrared interface for high speed printer
- Intergrated fuel type list: natural gas, liquid gas, oil heavy, oil light, pellets, wood, bio diesel, expandable fuel type list
- Bluetooth for wireless data transmission (option)
- Appr. 500 g weight

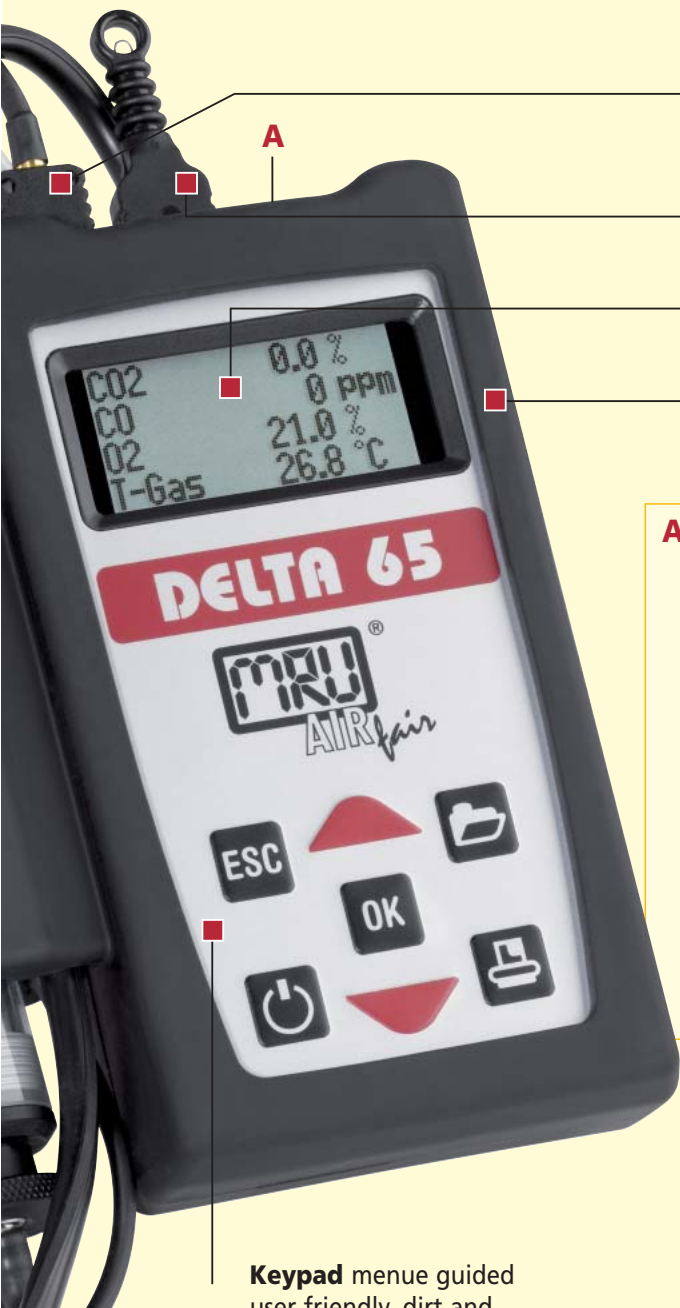
Measurement of:

O ₂	0 ... 21,00 %
CO ₂ calculated value	0 ... 20,00 %
CO	0 ... 4.000 ppm
Ambient air temperature	up to 100° C
Flue gas temperature	up to 1.100° C *
Stack draft measurement	± 50 hPa
Differential pressure	50 ... ± 200 hPa
Differential temperature	up to 650° C *
	* with adequate probes

TÜV approval / EN 50379 Standard / UNI-norm
CE-conform, ISO 9001:2008



ABS transport case
including infrared
high speed printer (option)



Sampling hose
transparent = gas
black = draft

Flue gas
temperature plug type K

Ambient air probe
temperature plug type K

LCD grafical display
illuminated, well legible

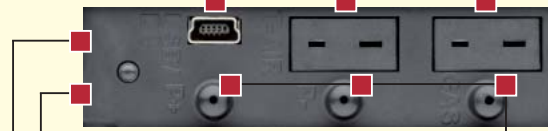
Rubber protection case
with fixing magnet

A

Connecting plate

Mini USB for cable data transfer and power supply or battery charging

K-type temperatur sockets



Bluetooth for wireless data transmission

Gas- and draft connectors

IRDA - printer interface

Keypad menue guided user friendly, dirt and moisture resistant

Condensate trap effective, optimized condensate trap with reusable teflon filter for protection against dirt and soiling

Standard calculations and software features

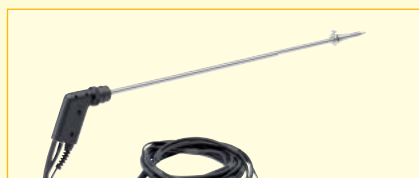
- CO₂, CO/CO₂ ratio
- Efficiency, losses, poison index
- Excess air
- Time tightness test
- Let by test
- CO ambient measurement

ALSO AVAILABLE AS HANDHELD FLUE GAS ANALYZER FOR

INDUSTRIAL APPLICATIONS

such as control- and adjustment measurements at industrial combustion sources. Single or multiple analysis of

- O₂**
- CO**
- NO**
- SO₂**
- H₂S**



Probes and hoses

MRU offers a wide range of standard (up to 650° C) and industrial probes (up to 1.100° C) with various lengths

