

DELTA *smart*

MY BEST DECISION!

Modern and powerful flue gas analyser for residential and commercial heating installations

Touchscreen
intuitive and
easy to use

Best value
for money



**MSM-
technology**
field replaceable
plug&play
sensors

- Modern technology
- High accuracy
- High performance

DELTA^{smart} - discover the smart difference

for residential and commercial combustion analysers

MRU proudly presents the multi-tool, high-tech, handheld analyser with all in one:

- flue gas analyser with actual combustion calculations
- digital manometer for stack draught and differential pressure
- digital dual channel thermometer
- ambient air CO tester

Using up to 3 electrochemical cells for O₂, CO and NO_x, this low cost analyser is best suited for all control and setup works of all kind of gas burners, condensing boilers, oil and biomass burners and others.

Intuitive software menu and modern touchpad bright colour display will guide you through all measuring programs. New MSM technology for measuring cells will offer you easy, fast plug&play

pre-calibrated cells to avoid long time analyser service downtime.

Store up to 1000 test data sets directly in the analyser internal data storage or on the micro-SD card, or even use Bluetooth™ for wireless data transfer to notebook or MRU Smart data App for Smartphone or tablet. Printing via infrared, high speed thermal printer is at the tip of your fingers.





ABS transport case and MRU speed thermal printer are the additional items included in the **DELTA^{smart}** set.

Smart power with:

- 3-gas measurement analyser with O₂ - CO - NO_x
- new MSM Sensor Technology, for field sensor replacement
- colour and backlit touchscreen, intuitive and easy to use
- combustion efficiency analyser with integrated ambient air tester
- differential manometer and dual channel digital thermometer
- at least 10 programmed fuel types with 2 customizable fuels
- high capacity, Lithium-Ion rechargeable battery
- internal data storage of up to 1000 complete measurement data sets
- all modern data interfaces included, like USB, Bluetooth™ and micro-SD
- IRDA printer interface for MRU high speed thermal printer

Options:

- NO_x measurement
- Micro-SD card
- Bluetooth™
- Speed printer

Ordering Information:

- DELTA^{smart}** single (version B or E)
- DELTA^{smart} set** (version B or E) - with ABS transport case and infrared printer



On site sensor replacement using the new MRU Sensor Management technology is easy, simple and fast.



Storage, transfer or print measured data using the multiple choices between micro-SD card, mini-USB, Bluetooth™ for wireless transfer to Smartphone or tablet or infrared printing.



Hands free operation with magnet power using the 4 magnets from analyser rear side, this one will firmly stick on ferrous surface.



Condensate and dirt are kept away using the large condensate trap with Teflon coated particulate filter.



Easy operation and colour, backlit display will intuitively guide you through all analyser measuring programs.



Product information: see www.mru.eu

or scan adjacent QR-code



DELTAsmart

Technical data

Measured components	Range	Accuracy
Oxygen O ₂	0 ... 25,0 Vol-% abs., resolution 0,1 %	± 0,2 Vol-% abs.
Carbon monoxide CO (H ₂ -comp.) (version B)	0 ... 4.000 ppm, resolution 1 ppm * overload up to 10.000 ppm	± 10 ppm or 5 % reading** < 4.000 ppm / 10 % reading > 4.000 ppm
Carbon monoxide CO (version E)	0 ... 10.000 ppm, resolution 1 ppm * overload up to 20.000 ppm	± 20 ppm or 5 % reading** < 4.000 ppm / 10 % reading > 4.000 ppm
Nitric monoxide NO	0 ... 1.000 ppm, resolution 1 ppm * overload up to 5.000 ppm	± 5 ppm or 5 % reading** < 1.000 ppm / 10 % reading > 1.000 ppm
Flue gas temperature	-40 ... +1.200 °C, resolution 0,1° C	± 1 °C ... < 200 °C / 1 % reading > 200 °C
Differential temperature	-40 ... +1.200 °C, resolution 0,1° C	± 1 °C or 0,5 %
Ambient air temperature	0 ... 100 °C, resolution 0,1 °	± 1 °C
Combustion air temperature	0 ... 100 °C, resolution 0,1 °	± 1 °C
Draught	± 50 hPa, resolution 0,01 hPa	± 0,02 hPa (mbar)
Differential pressure	± 100 hPa (mbar), resolution 0,01 hPa	± 0,02 hPa (mbar)
Other measurements	Ambient CO, analyzer leak test	
Combustion relevant calculations	CO ₂ , heat losses, combustion efficiency, dew point	
Calculated values	Fuel type depending	
Fuel types	Natural gas, light oil, wood dry, pellets, and others	
Carbon dioxide CO ₂	0 ... 20 %	
Dew point	°C, resolution 0,1 °	
Heat losses q _A	0 ... 99,9 %, resolution 0,1 %	
Combustion efficiency	0 ... 120 %, resolution 0,1 %	
Excess air	0 ... 999 %	
Air ratio	1 - 20	
General technical data		
Gas sampling probe	Ø 8 x 250 mm, stainless steel, for temperature up to 650 °C	
Operating temperature	+ 5 ... + 45 °C, max. 95 % RF, not condensing	
Storage temperature	- 20 ... + 50 °C	
Data storage	1.000 measurements / 1.000 sites	
Interfaces	Mini-USB, Micro-SD, IRDA, Bluetooth™ (data transfer to Smartphone, Tablet or PC)	
Internal power supply	Li-Ion 2250 mAh / 8 Wh	
External power supply	Wall plug 100 ... 240 Vac / 50 ... 60 Hz, 5 V DC, 500 mA	
Protection	IP 40	
Weight	appr. 390 g (without probe)	
Size	(W x H x D) 82 x 169 x 44 mm	

** which ever is larger

Data subject to change without notice * only for short time measurements
W-65198GB-K2-XX-067-HWH

MRU – sustainable analysing technology for more than 30 years!

MRU-representative:



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