PORTABLE
MULTI-COMPONENT
NDIR-GAS-ANALYZER

NDIR - DELTA 1600 S - IV *
*INDUSTRIAL VERSION
NDIR TECHNOLOGY WITH MOST COMPACT DIMENSIONS: DELTA 1600 S IV INDUSTRIAL VERSION

MULTI-COMPONENT GAS ANALYZER
Continuous analysis of CO, CO₂, HC on a NDIR basis and of O₂, NO₂ on an electro-chemical basis. Up to 5 gas components can be simultaneously recorded and documented with this handy, mobile gas analyzer. DELTA 1600S-IV is the smallest and the most lightweight (1000g) gas analyzer on NDIR basis. Equipped with a external battery, mobile operation up to 4 hours is possible. Areas difficult of access, where gases have be detected with high precision, e.g. disposal sites, cement industry, food industry, smokeries etc. are the range of use and operational areas for the NDIR gas analyzer DELTA 1600 S-IV... a MRU product where high quality meets low cost.

DELTA 1600S-IV is user optimised. It is a robust and versatilely usable gas analyzer.

⇒ It’s compactness, the low weight and the easy handling allow a versatile use.

⇒ An important contribution to environment protection.

NDIR DELTA 1600 S-IV INDUSTRIAL VERSION
Precisely configured for the different requirements of the industry, if e.g. combustible is not known or with different gas mixtures in process gases:

⇒ Strong gas pump for quick response time and overcome low pressure.
⇒ Optimum filter system: coarse and fine filter
⇒ Water / humidity stop inside
⇒ Gas sampling probe acc. to customer’s specifications
⇒ Operational temperatures up to 1100°C and above
⇒ With carrier belt for easy transport
⇒ With memory storage

Areas of use:
- Chemical Industry
- Incineration Plants
- Automobile Industry
- Metal Industries
- Smokeries etc.

Operational principle:
The operational principle is based on the "non dispersive infrared absorption measuring principle". By narrow band pass filter CO, CO₂, HC can selectively be measured, which allows the compactness of the measuring system.

Measurement of O and NO is effected by electro-chemical sensors. An integrated strong diaphragm pump sucks the gas and conducts it to the heated gas cell. A micro processor analyses concentration of the gas and indicates the corresponding values on a large illuminated display.

Possible range of user industry:
- Disposal Sites
- Food Industry
- Cement Industry
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The operational principle is based on the "non dispersive infrared absorption measuring principle". By narrow band pass filter CO, CO\textsubscript{2}, HC can selectively be measured, which allows the compactness of the measuring system. Measurement of O\textsubscript{2} and NO is effected by electro-chemical sensors. An integrated strong diaphragm pump sucks the gas and conducts it to the heated gas cell. A micro processor analyses concentration of the gas and indicates the corresponding values on a large illuminated display.

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- Disposal Sites
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DESCRIPTION AND EQUIPMENT:
MULTI-COMPONENT-NDIR-ANALYZER DELTA 1600 S-IV
INDUSTRIAL VERSION...the professional mobile analysis system
Suitable for control- and adjustment measurements at large industrial boilers, power stations, refineries, automobile industry, breweries, paper-, ceramic-, cement industry, incinerator plants, disposal sites, large boiler, food industry, smokeries etc.
Handheld portable gas analyzer based on NDIR-technology designed for robust industrial use, with strong gas pump, inclusive combined filter-unit with fine filter and condensate box, rechargeable battery standard.

Possibilities of the equipment:
NDIR MULTI-COMPONENT-ANALYZER
-**CO** carbon dioxide up to 20%  
-**HC** hydrocarbon up to 100%  
-**CO** carbon monoxide up to 100%  
-**O2** oxygen up to 22%  
-**CO** carbon dioxide up to 16%  
-**HC** hydrocarbon up to 15%  
-**CO** carbon monoxide up to 10%  
-**O2** oxygen up to 22%  

Other ranges, e.g. up to 40 or 60% on demand!

OPTIONS AND SPARE PARTS:
-**O2** oxygen measuring up to 22%  
-**NO** nitrogen dioxide measuring up to 5,000 ppm  
-300 mm gas sampling probe, Ø 8 mm, incl. 2,70 m gas sampling hose, useable up to 800°C  
-500 mm gas sampling probe, Ø 8 mm, incl. 2,70 m gas sampling hose, useable up to 800°C  
-1000 mm gas sampling probe, Ø 8 mm, incl. 2,70 m gas sampling hose, useable up to 1100°C  
-Coarse filter, for high dirt mounted directly after the gas sampling probe  
-probe holder, slewable  
-High temperature cone, for Ø 8 mm probes, up to 1,000°C  
-Battery pack, rechargeable, 12V, capacity 4 hours (spare part)  
-Infrared thermoprinter  
-ABS-transportcase  
-Aluminium framed case  
-Service- and cleaning set  
-Starfilter (fine filter)  
-Filtertabs

TECHNICAL DATA:
-**CO** 0 - 10% or 0 - 100% vol.  
-**CO** 0 - 20% or 0 - 100% vol.  
-**HC** 0 - 10% or 0 - 100% vol.  
-**O2** option 0 - 22% vol.  
-**NO** option 0 - 5,000 ppm vol.

Emptying condensate trap: manually  
IR-interface: IR-thermoprinter (option)

Power supply:  
Rechargeable battery pack 12V external, (standard)  
Quick charger for battery pack (standard)  
Power supply 100 to 240VDC / 12VDC (option)

Gas sampling probe:  
Tube 300 mm, 500 mm or 1000 mm slewable, up to 800°C and 1000 mm up to 1100°C with 2,7 m gas sampling line.

Operating temperature: + 5°C to + 40°C

Storage temperature: - 20°C to + 50°C

Dimensions:  
100 x 210 x 60 mm (without case)  
140 x 225 x 65 mm (with case)

Weight:  
approx. 2.000g with battery and case

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