

NOVA *compact*

THE ULTIMATE RUGGED AND COMPACT ANALYZER FOR PROFESSIONALS



O₂

CO

CO₂

NO

NO_x

°F

Δ°F

ΔP

Draft

Pres-
sure



since 1984 ®

AIR *fair*

EMISSION MONITORING SYSTEMS

Over 30 years of innovative gas analysis!

- Low cost of ownership
- Extremely user friendly
- +4 Years O₂ sensor Life Expectancy
- Active CO sensor protection
- Rugged aluminum transport case

FOR PROFESSIONALS

who are looking for an extremely compact and rugged analyzer
Equipped with everything needed for daily checks for combustions
of all kinds - Intuitive and user-friendly

MRU 4 win PC Software for trending and export



6 measurement values per customizable screen

Program 1, Natural gas	
O2	2.0
CO2	10.7
CO	> 500
NO	30
NO2	3
NOx	33
Up	Down

Built in high speed printer



OPTIONAL gas cooler



OPTIONAL CO sensor protection NOx/ SOx filter



Simultaneous measurements of up to 4 gas components!

- O₂, CO, CO₂, NO, CO-high, & CO-very high,
 - Up to 4 electrochemical sensors
 - Low CO and NO ranges are available
- Gas temperature measurement up to 2,012°F
(use stainless steel up to 1,200°F, use Inconel tubes up to 2,012°F)
- Large condensate separator with PTFE (Teflon) coated filter
- Air purging pump for CO-sensor protection
- Internal data storage for up to 16,000 measurements!
- High energy Li-Ion battery (up to 15 hours operation time)
- Color backlit 3.5" TFT display with zoom function
- Customizable screen settings
- Durable and dirt resistant keypad
- Built in high speed printer
- Integrated SD card reader for additional data storage and data transfer to PC

Also measures...

- Combustion air temperature
- Stack gas temperature
- Stack draft
- Differential pressure
- Differential temperature

And calculates...

- CO₂
- CO/CO₂ ratio
- Dew point
- Excess air and air ratio (Lambda)
- Combustion efficiency
- Heat losses

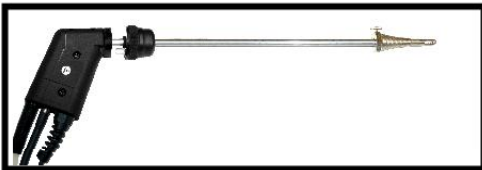
DON'T COMPROMISE ACCURACY FOR PORTABILITY!

The NOVAcompact gives you the best of both!

PROBES AND PROBE TUBES



Standard probe: 10" insertion;
7.2' rugged sampling line with
K-Type t/c (1,200°F max) and silicone hose
for combustion applications

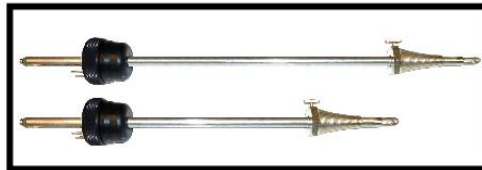


Industrial probe for interchangeable probe
tubes with 7.2' or 16' rugged, braided sheathed
sampling line with K-Type t/c and Viton hose
for combustion and emission measurements

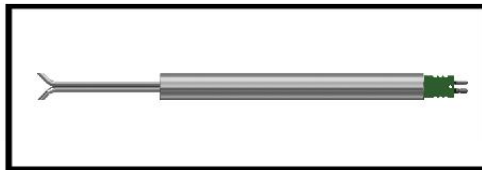


L-Type SS with or without K-Type t/c
In sizes from 4" (0.12 ϕ) to 79" (0.47 ϕ)

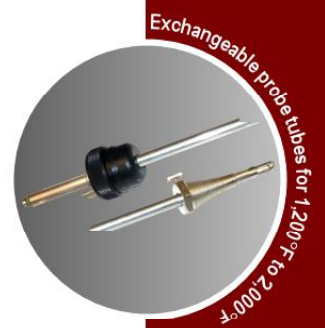
PITOT TUBES



Probe tubes (4" to 80" long)
in SS (1,200°F) or Inconel (2,000°F)
Also available with sintered metal filter



S-Type SS with K-Type t/c (59" lead) and 1.1" ϕ
protection tube
Available in 19" or 39" lengths (0.31" ϕ)



Exchangeable probe tubes for 1,200°F to 2,000°F



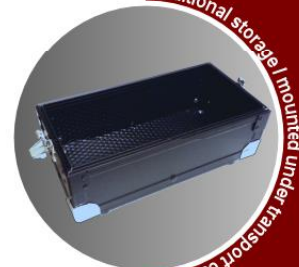
Sintered metal filter



HC leak detection probe (requires AUX output option)



Rugged, aluminum framed transport case



Additional storage / mounted under transport case



Extraction probe

Condensate separator
with PTFE filter
(Optional gas cooler)

Gas vent

Durable, dirt
resistant keypad

Additional ports

High speed printer

Rugged aluminum
framed transport case

3.5" color display
with zoom function

TECHNICAL SPECIFICATIONS

NOVAcompact analyzer		Portable analyzer with up to 4 electrochemical sensors	
Fuel types		Natural gas, liquid gas, oil light, pellets, wood, coal, and user definable fuels	
Measurement components		Measuring range	Accuracy
O ₂	Oxygen	0 ... 21.0 Vol-%	± 0.2 Vol-% abs.
CO	Carbon monoxide (H ₂ compensated)	0 ... 4,000 ppm overload 20,000ppm *	± 20 ppm or 5 % reading < 4,000 ppm / 10 % reading > 4,000 ppm
CO	Carbon monoxide low	0 ... 500 ppm with 0.1 ppm resolution **	± 2.0 ppm or** 5 % reading
CO	Carbon monoxide very high	0 ... 40,000 ppm overload 100,000ppm *	± 0.02% or 5 % reading < 0.4% / 10 % reading > 0.4%
NO	Nitric oxide	0 ... 1,000 ppm overload 5,000ppm *	± 5 ppm or 5 % reading < 1,000 ppm / 10 % reading > 1,000 ppm
NO	Nitric oxide low	0 ... 300 ppm with 0.1 ppm resolution **	± 2.0 ppm or** 5 % reading

*overload range recommend only for short time measurements

**are not separate sensors; selected sensors are used with special calibration

Stack / Flue gas temperature	0 ... 1,200°F / 2,012°F (with stainless steel / Inconel steel tube)	± 4°F ... < 392°F / 1 % reading > 392°F
Primary-air / Ambient temperature	0 ... 212°F	± 2°F
Differential temperature	up to 2,012°F (with suitable material of sampling tube)	± 4°F ... < 392°F / 1 % reading > 392°F
Stack / Differential pressure	+/- 40 inH ₂ O (100hPa)	
Gas flow velocity measurement	1 ... 40 m/s (using Pitot tube)	

Calculated values (fuel type dependent)

Carbon dioxide	0 ... CO ₂ max.	Air Ratio (Lambda)	1 ... 9.99
Heat losses q _A	0 ... 99.9 %	Excess Air	0 ... 99.9
Efficiency	0 ... 100 % / 120 %	CO/CO₂ ratio	0 ... 10

General specifications

Operation temperature	41°F 113°F, max. 95 % RH, non condensing
Storage temperature	-4°F 122°F
Ambient conditions	not in aggressive, corrosive or high dust environments, not for use in hazardous areas
Power supply	Lithium-Ion battery, 10 h operation, (with gas cooler 2 ... 3 h)
Grid power supply	100 - 240 Vac / 50 ... 60 Hz / 60 W
Weight	approx. 15lbs (6.8 kg)
Dimensions	16.65" x 9.45" x 6.93" (W x H x D) 423 x 240 x 176 mm

Data subject to change without notice

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