



Measures

- Oxygen
- Carbon Monoxide
- Stack Temperature
- NO_x
- SO₂

Calculates

- Carbon Dioxide
- Excess Air
- Stack Loss
- Combustion Efficiency

Combustion Testing for Residential, Commercial and Industrial Applications

The Model 300 lets you conduct easy and accurate electronic combustion analysis on a broad range of fossil fuel burning appliances – from small to large condensing and non-condensing furnaces and boilers. The unit's microprocessor controls the sequence of operation while calculating burner efficiency. It's user-friendly interface leads you through proper procedures, and makes combustion testing easy.

A variety of options are offered with the Model 300, including Fahrenheit or Celsius measurements, an optional printer for easy test data documentation, standard or Sievert formulas for determining combustion efficiency, NO_x and SO₂ measurement versions, 120VAC, 240VAC and battery pack, and extended sampling probes and hoses.



Features & Benefits

- Programmed for domestic fuels
natural gas, fuel oil #2, fuel oil #6, liquid propane, coal, wood, and bagasse.
- Programmed for European fuels
natural gas (with and without fan), light and heavy oil, liquid propane, koks/coal gases and stadgas/low energy gas.
- Electronic measurements for greater accuracy
O₂, CO, NO_x, SO₂ and temperature.
- Three large, angled, digital displays
easy-to-read, offering both continuous and independent functions.
- Lightweight, durable and compact
completely portable, weighs about 15 pounds.
- High performance pump
continuously draws filtered flue gas into the unit.
- Two large flue gas traps
filter water, soot and particulates before they can enter the instrument.
- Rugged and roomy case
with metal hinges and latches for added strength and durability.

SPECIFICATIONS

Measurement Ranges	Oxygen Carbon Monoxide Stack Temperature (optional extended probes) Oxides of Nitrogen (optional) (NO _x) Sulfur Dioxide (optional) (SO ₂)	0 – 25% 0 – 3,000 ppm 2000° F (1093° C) 0 to 2,000 ppm 0 to 2,000 ppm
Readouts	Three to six LED 0.5" (1.27cm) Digital Displays switchable between: 1. Temperature / Carbon Monoxide / Error 2. % Oxygen / % Excess Air / O ₂ Cell Output 3. % Efficiency / % Loss / % Carbon Dioxide 4. Real Time Clock (available with NO _x and SO ₂) 5. ppm NO _x (optional) 6. ppm SO ₂ (optional)	
Accuracy	Oxygen (automatic calibration) Carbon Monoxide (factory calibration) Temperature Oxides of Nitrogen (factory calibration) Sulfur Dioxide (factory calibration)	± .6% ± 5% reading ± 1% full scale ± 5% reading ± 5% reading
Weight	15 lbs. (6.8 kg) to 17 lbs. (7.7 kg) – depends on configuration	
Main Supply	120/240VAC, 50/60Hz dependent on model	
Battery Supply	Rechargeable lead acid battery pack. Typical discharge is 12 – 16 hours of continuous operation. Also operates on line power.	
Pump Draw	10" (250mm) H ₂ O	
Size	18" x 14" x 8" (46 x 36 x 20cm) carrying case 11.5" (29 cm) probe with 22' (6.7m) of hose	
Materials	High density polyethylene case. Polycarbonate membrane switch. Stainless steel probe	
Data Output	RS 232 port for computer data transfer (NO _x and SO ₂ versions only)	

Meet The Needs Of Environmental Testing

The Model 300 can be ordered with NO_x and SO₂ measurements. An optional NO_x and SO₂ upgrade kit is available for all Model 300 configurations. A printer must exist or be added before Model 300 can be upgraded. Call us for more information and available customized options.

ORDERING INFORMATION

STANDARD CONFIGURATION

PART NO.	DESCRIPTION
24-8108	Battery w/o Printer, Standard – 120VAC Charger
24-8109	Battery, Printer, Standard – 120VAC Charger

MODEL 300 NSX CONFIGURATION

PART NO.	DESCRIPTION
24-8102	Model 300 NSXD, 240VAC, NO _x and SO ₂ Measurement w/ Printer
24-8130	Model 300 NXB, Battery, NO _x Measurement w/ Printer
24-8132	Model 300 NXS, Battery, NO _x and SO ₂ Measurement w/ Printer

Standard configurations are supplied with CO Sensor, O₂ Sensor, probe and hose assembly and operating instruction. NSX configurations include the addition of the NO_x Sensor and/or the SO₂ Sensor. A standard Bacharach printer must exist before NO_x and SO₂ can be added.

PART NO. REPLACEMENT ITEMS

24-0108	Replacement Oxygen Sensor
24-0498	Replacement Carbon Monoxide Sensor
19-8001	Replacement NO _x Sensor
19-8002	Replacement SO ₂ Sensor
24-0529	Charger, 120VAC Input
24-0528	Charger, 240VAC Input

PART NO. REPLACEMENT ITEMS

24-7059*	Portable Calibration Kit (w/o gas)
24-0492*	CO Gas Cylinder, 500 ppm (for use with 20-7059)
21-7006	True Spot Smoke Test Set
24-7061	Retrofit Printer Kit
24-0531	Printer Paper – box of 10 rolls
24-8133	High Efficiency Dryer Kit

*Calibration Kit is not supplied with analyzer. Calibrating the sensors is required and frequency should be determined by experience.

- NO_x and SO₂ upgrade kit, printer retrofit kits and rechargeable battery options also available.
- Enhanced 2 year O₂ Sensor and warranty available.
- Extended sampling probes and hose extensions available.

To order The Model 300, contact your local Bacharach distributor, or call 1-800-736-4666 for more information.