

Combustion Efficiency and Emissions Analyzers with Built-in Printer

Ideal for HVAC applications, including boilers and heaters

Designed for tuning boilers and furnaces to achieve maximum efficiency and minimum NO_x and SO₂ emissions. This unit is designed for any new low-NO_x requirements.

- Measures O₂, CO, NO, and SO₂, depending on the model
- Calculates CO₂, NO_x, efficiency, and excess air
- Built-in printer (nonthermal paper)
- Data logging up to 900 readings
- Set up to 5 separate alarms, high or low
- Bright blue backlit LCD with zoom feature
- Unbreakable metal probe connectors
- Dual hose probe for gas and draft at same time
- BTU1100 features RS-232 output; BTU4400 features USB output



86504-15

SPECIFICATIONS			
Parameter	Measurement range	Resolution	Accuracy
O ₂	0 to 25%	0.1%	±0.2% volume
CO	0 to 8000 ppm	1 ppm	±10 ppm <400 ppm ±5% of reading up to 2000 ppm ±10% of reading for >2000 ppm
CO ₂ (calculated)	0 to 99.9%	0.1	—
NO	0 to 4000 ppm	1 ppm	±5 ppm <100 ppm ±5% of reading up to 2000 ppm ±10% of reading up to 4000 ppm
NO ₂	0 to 1000 ppm	1 ppm	±5 ppm <100 ppm ±5% of reading up to 1000 ppm
NO _x (calculated)	0 to 5000 ppm	1 ppm	—
SO ₂	0 to 4000 ppm	1 ppm	±5 ppm <100 ppm ±5% of reading up to 4000 ppm
Draft pressure	±0 to 40" H ₂ O	0.001" H ₂ O	±1% of reading
Flue temperature	-4 to 2280°F (-20 to 1250°C)	0.1°F (0.1°C)	±0.9°F (0.5°C) from -4 to 212°F ±0.5% of reading for >212°F
Air temperature	-10 to 212°F (-23 to 100°C)	0.1°F (0.1°C)	±1°F
Efficiency	0 to 100%	0.1%	—
Excess air	1.00 to infinity	0.01	—
Fuels	10 standard including natural gas, propane, butane, #2 oil, #4 oil, #6 oil, wood, coal		
Dimensions (W x H x D)	4½" x 12" x 3¾" (10.5 x 30.7 x 9.6 cm)		
Power	AC charger and rechargeable batteries		

What's included: Factory-calibrated installed sensor, 12" (305 mm) L sampling probe, 10-ft (3-m) dual hose, rubber boot, built-in printer, nonthermal printer paper, carrying case, rechargeable battery with AC charger, and calibration document supplied by the manufacturer. Models 86494-65, -75, -80, and -85 also include software.

Catalog No.	Model No.	Description
TS-86504-15	BTU1100-1	Basic combustion analyzer; O ₂ , CO, CO ₂ , temperature
TS-86504-65	BTU4400-2	Advanced combustion analyzer with software (with option to add NO/NO _x sensor); O ₂ , CO, CO ₂ , temperature
TS-86504-75	BTU4400-3	Advanced combustion analyzer with software; O ₂ , CO, CO ₂ , NO, NO _x , temperature
TS-86504-80	BTU4400-5	Professional combustion analyzer with software; O ₂ , CO, CO ₂ , NO, NO _x , SO ₂ , temperature
TS-86504-85	BTU4400-N	Professional combustion analyzer with software; O ₂ , CO, CO ₂ , NO, NO _x , temperature
Accessories		
TS-86504-51	AAA32-240	Replacement O ₂ sensor
TS-86504-52	AB510-WOX	Replacement CO sensor
TS-86504-53	AF508-WOC	Replacement NO/NO _x sensor
TS-86504-55	AG526-W00	Replacement NO ₂ sensor
TS-86504-56	AD527-W04	Replacement SO ₂ sensor
TS-86504-54	AACFA01	Replacement particulate filter
TS-86504-57	AACKP01	Optional differential pressure kit