



**Comes With A
2 Year Warranty**



selectable fuels

- Natural Gas
- Oil #2
- Oil #4
- Oil #6
- Kerosene
- Propane
- Coal



See back for ordering information and included components.

Portable Combustion Analyzer

The PCA® is the perfect tool for service technicians and boiler contractors who need to determine carbon monoxide (CO) safety, combustion efficiency and emission testing in combustion applications. The PCA® directly measures and displays flue gas O₂, temperatures, draft, differential pressure, NO_(x) and CO. Simultaneously, the instrument calculates and displays combustion efficiency, excess air, CO₂, NO_(x)-Ref. O₂ and CO air free. The large display shows eight different values simultaneously with backlight. The PCA® provides seven (7) fuels: natural gas, oil 2, oil 4, oil 6, kerosene, liquid propane and coal, for calculating combustion values.

The PCA® offers communication features to track and analyze combustion safety tests, efficiency calculations and environmental analysis for residential and commercial applications.

The advanced communication features of the PCA® 55 and the PCA 65 allow the user to store up to 100 tests, customize each combustion test with customer information, generate a personalized printout, and download all of this information to a personal computer for record keeping and trend analysis.



Probe P/N 24-3003
For Models 10 & 20
(Without draft)

Probe P/N 24-3004
For Models 25, 35, 55, & 65
(With draft)

Instrument comes complete with: Carrying case, probe and hose assembly, factory calibrated and installed sensor(s), instruction manual, user guide, batteries (packaged separately) and a two-year warranty. All instruments can be upgraded to include CO, Draft, NO_x and other option combinations are available on request.

*Each PCA® that is equipped with Draft / Differential Pressure includes gas pressure test tubing with fittings for ease of appliance line and manifold gas pressure measurement.

SPECIFICATIONS

Measurement Ranges	Oxygen Primary/Ambient Air Temperature Stack Temperature Carbon Monoxide (optional) Draft (optional) NO _x (optional)	0.1 to 20.9% 0 °F to 999 °F (-18 °C to 999 °C) 0 °F to 2,192 °F (-18 °C to 1,200 °C) 0 to 4,000 ppm (hydrogen compensated) -28.0 to + 28.0 in. WC (or user selectable in Pascal or Millibar) 0 to 1,000 ppm
Calculated Ranges	Combustion Efficiency Excess Air Carbon Dioxide Carbon Monoxide Ref O ₂ NO _x Ref. O ₂	0.1 to 99.9% (0.1% resolution) 1 to 250% 0.1 to a fuel dependent max. value in percent 0 to 9,999 ppm (on analyzers equipped with CO sensors) 0 to 9,999 ppm (on analyzers equipped with NO sensors)
Accuracy	Oxygen Carbon Monoxide NO _x Draft/Differential Pressure Stack Temperature Primary/Ambient Temperature	± 0.3% Oxygen (on flue gas) ± 5% of reading or ± 10 ppm, whichever is greater between 0 to 2,000 ppm; and ± 10% of reading between 2001-4000 ppm ± 5% of reading or ± 5 ppm, whichever is greater ± 2% of reading or ± 0.02 inches of H ₂ O, whichever is greater ± 4 °F between 32 to 255 °F (± 2 °F between 0 to 124 °C) ± 6 °F between 256 to 480 °F (± 3 °C between 125 to 249 °C) ± 8 °F between 481 °F to 752 °F (± 4 °C between 250 to 400 °C) ± 2 °F between 32 to 212 °F (± 1 °C between 0 to 100 °C)
Size	8.5"H x 3.8"W (at display) x 2"D (21.5 cm x 9.7 cm x 5.1 cm)	
Weight	Approximately 1.5 lbs. (0.68Kg) with batteries	
Power Source	Four disposable AA size alkaline batteries; minimum of 8 hours of continuous operation. Optional 120 VAC or 240 VAC power supply is available for line operation	
Display	A 20 character by 4 line alpha numeric display with backlight	
Warm Up Time	A 60 second total warm up time (Sensors are checked and autozeroed during warm up)	

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ORDERING INFORMATION

Model P/N	MEASUREMENTS	CALCULATIONS	FEATURES
Model PCA 10 P/N 24-8040	Oxygen Air Temperature Stack Temperature	Combustion Efficiency Excess Air Carbon Dioxide	Printer Interface Memory Storage-10
Model PCA 20 P/N 24-8042	Oxygen Air Temperature Stack Temperature Carbon Monoxide	Combustion Efficiency Excess Air Carbon Dioxide CO (air free)	Printer Interface Memory Storage-10
Model PCA 25 P/N 24-8043	Oxygen Air Temperature Stack Temperature	Combustion Efficiency Excess Air Carbon Dioxide CO (air free)	Printer Interface Memory Storage-10
Model PCA 25 w/printer P/N 24-8243	Carbon Monoxide *Draft/Differential Pressure		
Model PCA 35 P/N 24-8045	Oxygen Air Temperature Stack Temperature	Combustion Efficiency Excess Air Carbon Dioxide CO (air free)	Printer Interface Memory Storage-10
Model PCA 35 w/printer P/N 24-8244	Carbon Monoxide *Draft/Differential Pressure NO _x	NO _x (air free)	
Model PCA 55 P/N 24-8143	Oxygen Air Temperature Stack Temperature Carbon Monoxide *Draft/Differential Pressure	Combustion Efficiency Excess Air Carbon Dioxide CO Ref O ₂	Printer Interface Memory Storage-100 Customized Printout Customer ID Computer Interface
Model PCA 65 P/N 24-8145	Oxygen Air Temperature Stack Temperature	Combustion Efficiency Excess Air Carbon Dioxide CO Ref O ₂	Printer Interface Memory Storage-100 Customized Printout Customer ID Computer Interface
Model PCA 65 w/printer P/N 24-8245	Carbon Monoxide *Draft/Differential Pressure NO _x	NO _x Ref O ₂	

SPARE PARTS AND ACCESSORIES

PART NO.	DESCRIPTION
24-0788	Replacement Oxygen sensor
24-0789	Replacement CO sensor
24-0863	Filter for CO sensor
21-0881	Replacement NO _x sensor
24-0862	Filter for NO _x sensor
204-0020	Battery, NO sensor bias
24-1229	IrDA Printer
24-1310	Printer paper rolls (5) for IrDA printer
19-3265	Replacement water trap / filter assembly
24-1124	20 ft. extended hose with sample draft & thermocouple lines
24-0885	External power supply 120V
24-1209	External power supply 230V
24-8214	Pressure Accessory Kit
24-7059	Calibration Kit (less calibration gas)
07-1644	Replacement Filter Element (short, white), pkg. of 3
07-1598	Replacement Filter Element (long, white), pkg. of 3
104-1797	Thermocouple 10 ft. (for combustion air temp.)
104-1798	Thermocouple 1 in. (ambient air temp.)
21-7006	True Spot® Smoke Test Set
19-3037	Probe stop(supplied with thumb screw)
24-1168	Protective rubber boot



ISO 9001



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