



PORTABLE COMBUSTION ANALYZER



Comes with a
2 Year Warranty

SELECTABLE FUELS

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

PCA[®]

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-Ref. O₂. The large, backlit display shows eight different values simultaneously. 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 analyzer 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 the information to a personal computer for record keeping and trend analysis.

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SPECIFICATIONS		
	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 Milibar) 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 150% 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 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	

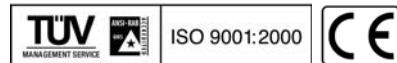
Instrument comes complete with: Hard carrying case, probe and hose assembly, factory calibrated and installed sensor(s), instruction manual, user guide, batteries (packaged separately) and a two year warranty. All instruments can be upgraded to include CO, Draft, NO_(x) and other option combinations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

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

Distributed By:



Technical Training for Heating & Cooling



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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	Printer Interface Memory Storage -10
Model PCA 25 w/printer P/N 24-8243	Carbon Monoxide *Draft/Differential Pressure	CO (air free)	
Model PCA 35 P/N 24-8045	Oxygen Air Temperature Stack Temperature	Combustion Efficiency Excess Air Carbon Dioxide	Printer Interface Memory Storage - 10
Model PCA 35 w/printer P/N 8244	Carbon Monoxide *Draft/Differential Pressure NO _(x)	CO (air free) NO _(x) (air free)	
Model PCA 55 P/N 24-8143	Oxygen Air Temperature Stack Temperature	Combustion Efficiency Excess Air Carbon Dioxide	Printer Interface Memory Storage - 100
Model PCA 55 w/printer P/N 24-8249	Carbon Monoxide *Draft/Differential Pressure	CO Ref O ₂	Customized Printout Customer ID Computer Interface
Model PCA 65 P/N 24-8145	Oxygen Air Temperature Stack Temperature	Combustion Efficiency Excess Air Carbon Dioxide	Printer Interface Memory Storage - 100
Model PCA 65 w/printer P/N 24-8245	Carbon Monoxide *Draft/Differential Pressure NO _(x)	CO Ref O ₂ NO _(x) Ref O ₂	Customized Printout Customer ID Computer Interface

SPARE PARTS AND ACCESSORIES	
PART NO.	DESCRIPTION
24-0788	Replacement Oxygen sensor
24-0789	Replacement CO sensor
24-0863	Filter for CO sensor
24-0881	Replacement NO _(x) sensor
24-0862	Filter for NO _(x) SENSOR
204-0020	Battery, NO sensor bias
24-1400	IrDA Printer w/disposable batteries
24-1229	IrDA Printer
24-1310	Printer Paper, 5 rolls for IrDA 24-1400 and 24-1229
06-8733	Printer Paper, 1 roll for IrDA 24-1400 and 24-1229
19-3265	Replacement water trap / filter assembly
24-1124	20 ft. extended hose w/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 three
07-1598	Replacement Filter Element (long, white), pkg of three
104-1797	Thermocouple 10 ft. (for combustion air temp)
104-1798	Thermocouple 1 in. (ambient air temp.)
21-7006	True Spot [®] Smoke Test Kit
19-3037	Probe stop (supplied with thumb screw)
24-1168	Protective rubber boot
24-8414	Thermocouple replacement kit, 12" probe

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