Combustion Analyzer CA502





PORTABLE COMBUSTION ANALYZER Easy to Use • Reliable • Accurate



Six Reading Parameters Displayed



Ambient CO Monitor, Manometer and Analyzer All in One Instrument

The YELLOW JACKET® Combustion Analyzer (CA502 and CA502P) is an essential tool for ensuring the safety, efficiency, and proper operation of heating appliances. With six simultaneous readings displayed, CA502 is among the best in the industry. Compact and lightweight, the analyzer with a magnetic protective holster fits in the palm of your hand. The CO over-limit protection provides sensor longevity and the 7" duct probe with adjustable depth stop allows for easy installation and use at any jobsite. A wireless printer option and YJ Combustion App make the YELLOW JACKET® Combustion Analyzer the simplest combustion analyzer on the market!

The inline condensate trap and soot filter provides easy viewing and easy change out and cleanup at the end of a job. A replaceable filter is integrated into the suction line and can be easily replaced while emptying the water trap. The onboard pre-calibrated O2 sensors are easily field-replaceable, allowing for reduced downtime.

Integral manometer functionality and optional manometer tube accessory allows for monitoring of system and flue pressures. Integrated startup zeroing makes this unit a great ambient and flue gas CO detector. Displays PPM for CO, preventing local CO poisoning hazard, as well as setting fuel to the correct efficient burn. The YELLOW JACKET® Combustion Analyzer CA502 and CA502P include all the features needed to safely install and service customers efficiently and effectively.

FEATURES & BENEFITS

- 2 Gas Sensors for O₂ and CO
- Draft, Pressure and Temperature Measurements
- High CO Protection
- Field-Replaceable Sensors
- CO₂, Combustion Efficiency, Excess Air
- Ambient CO Monitoring
- YELLOW JACKET® YJ Combustion App
- Automatic Generation of QR Code to Download Analyses to Share with Customers or for Records
- CO Air Free
- Built-in Dual Pressure Manometer
- Ideal for High-Efficiency Condensing Systems
- Internal Data Storage







UPC #	Description				
68601	Combustion Analyzer CA502				
68602	Combustion Analyzer CA502P with Printer				
OPTIONAL ACCESSORIES					
68611	Combustion Analyzer Printer				
68620	Combustion Analyzer Manometer Hose				
REPLACEMENT PARTS					
68612	Combustion Analyzer Filters 5 Pak				
68613	Combustion Analyzer AC Charger Kit				
68614	Combustion Analyzer USB Cable for Charge				
68615	Combustion Analyzer Carrying Case				
68616	Combustion Analyzer Printer Paper 5 PK				
68617	Combustion Analyzer Water Trap ASM				
68618	Combustion Analyzer O-Ring for Water Trap				
68619	Combustion Analyzer 02 Sensor				
68621	Combustion Analyzer POSG Cone for Probe				
68622	Combustion Analyzer Flue Gas Probe				
68623	Combustion Analyzer Battery				
68624	Combustion Analyzer Rubber Probe Cover				

FEATURES & BENEFITS Continued

- 15 Programmed Fuels (including #2 Oil, #4 Oil, #6 Oil, Natural Gas, Propane, Wood, Biofuel and more)
- · Backlit Display for Easy Viewing
- Protective Magnetic Rubber Holster for Hand Free Operation
- Long Lasting Rechargeable Battery holds charge for 8 hours
- Optional Wireless Bluetooth® Printer (included in CA502P P/N 68602)
- High Altitude Adjustment
- 12-Month Warranty

CA502 INCLUDES:

- Analyzer with Protective Magnetic Rubber Holster
- · Water Trap with Filter Cartridge
- Flue Gas Probe 7" with Positioning Cone and 5' Dual Hose
- · Rechargeable Battery and AC Charger
- Wireless Bluetooth® Printer (included in CA502P P/N 68602)
- Quick Start Guide and Calibration Certificate
- Acceptable Combustion Results Guide
- Protective Hard Carrying Case









MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY
02	Electrochemical	0 25.0% vol.	0.1% vol.	±0.2% vol.
CO High Immunity H ₂ with NOx Filter	Electrochemical	0 4000 ppm	1ppm	±20 ppm 0 400 ppm ±5% measured value 401 4000 ppm
CO ₂	Calculated	0 99.9% vol.	0.1% vol.	
Air Temperature	TcK Sensor	-4.0 248.0 °F -20.0 120.0 °C	32.18 °F 0.1 °C	±33.8 °F ±1 °C
Flue Gas Temperature	TcK Sensor	-4.0 1472.0 °F -20.0 800.0 °C	32.18 °F 0.1 °C	33.8 °F (±1 °C) 32 212 °F (0 100 °C) ±1% Measured Value 213.8 1472 °F (101 800 °C)
Pressure (draft and differential)	Piezo Resistive	-40.1 +80.4 inH ₂ 0	0.004 inH ₂ 0	±1% Measured Value -40.10.81 inH ₂ 0 ±0.08 inH ₂ 0 -0.80 +0.80 inH ₂ 0 ±1% Measured Value +0.81 +80.4 inH ₂ 0
Temperature Differential	Calculated	31.0 1472.0 °F 0 800.0 °C	0.1 °C	
Air Index	Calculated	0.00 9.50	0.1	
Excess Air	Calculated	0 850%	1%	
Stack Losses	Calculated	0.0 100.0%	0.10%	
Efficiency	Calculated	0.0 120.0%	0.10%	
Warranty	1 Year on Analyzer and 1 Year on Sensors			