# **OCTANE ANALYZER FOR UNLEADED GASOLINES**

## **Test Method**

Determines the Pump Octane Number (AKI), Research Octane Number (RON), and Motor Octane Number (MON) of unleaded gasoline, ethanol blended gasoline, leaded gasoline and Cetane Number for diesel fuels.

# **Portable Octane Analyzer**

- · Test results equivalent to ASTM D2699 and D2700 test methods
- Measures all grades of unleaded gasoline and ethanol blended gasoline
- Test results equivalent to ASTM D613 for Cetane Number of diesel fuels (Optional with K88612)
- Displays results in 20 seconds
- Directly measures octane number for {(R+M)}/2, RON and MON
- Optional feature for cetane number determination of diesel fuels
- Includes RS-232 output, built-in printer and LCD display
- · Results traceable to official knock engine laboratory
- · GPS model available for use with GPS locator accessory

Measures octane number via near-infrared (NIR) transmission spectroscopy utilizing 14 near-infrared emitting diodes with narrow bandpass filters, a silicon detector system, and a fully integrated microprocessor. Simple octane number determination requires three easy steps: sampling a background signal, acquiring two absorption spectra of the gas sample, and then acquiring a second background signal. Analyzer is pre-calibrated for unleaded gasoline and ethanol-blended fuels, and can be calibrated for up to eight additional fuel types.

The analyzer is small, lightweight, and operates on "AA" batteries or AC. Before each reading, the unit standardizes itself to assure accuracy. The octane number is printed with time and date on the built-in printer. All data can be downloaded via the RS232 port to an external computer.

#### **Specifications**

Accuracy and repeatability equivalent to ASTM approved CFR engines test methods (ASTM D2699, D2700) Sample Holder: Sealed, cubical glass container (75mm optical path length) Sample Volume: 8 Ounces (approx. 225 mL) Operating Temperature Range: 7°C - 38°C Pre-calibrated for unleaded & ethanol-blended gasoline (Analyzer can be calibrated for up to 8 additional fuel types.) Battery operated (6 AA batteries) Electrical Requirements:  $\zeta \in$ 

115/240V 50/60Hz

#### **Safety Features**

Out of Temperature Range Warning: Analyzer displays Out of Range Warning Message when instrument in being used outside of its standard operating temperature range. Either above 38°C or below 7°C.

Out of Calibration Range Warning: Analyzer displays "Too High" or "Too Low" message when measurement reading is out of the instruments calibration range.

Bad Curve Warning: Analyzer warns user when light protective lid is not on during testing. External light source will greatly disrupt results.

#### **Included Accessories**

Calibration Software Aluminum Carrying Case Sample Holder (3) AA Battery (6) RS232 Cable Printer Paper Roll (5) Light Cover Sample Holder Label (6)



**Dimensions** wxdxh,in.(cm) 13½x4½x2½ (34x11½x6¼) Net Weight: 12 lbs (5.5kg) Shipping Information 23x17x8½ (58½x43½x22) Shipping weight: 25 lbs (11.5kg)

### **Ordering Information**

Catalog No. K88600 Portable Octane Analyzer K88600-GPS Portable Octane Analyzer GPS Model Requires GPS Locator Feature (K88613) **Accessories** K88601 Printer Paper, 10 Rolls K88603 Sample Holder (additional) K88604 Sample Holder (Box of 12) Light Shield K88605 K88606 RS232 Cable K88607 Aluminum Sample Carrying Case w/12 Sample Holders K88608 Sample Holder Lids, Quantity 12 K88609 Sample Holder Labels, Quantity 12 K88610 25 Sample Memory **Optional Features** 

K88612	Cetane Number Calibration
K88602	Additional Fuel Calibration
K88613	GPS Locator (for K88600-GPS model only)