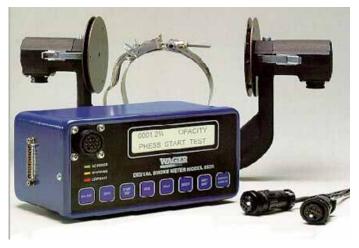
# **Model 6500 Smoke Meter**

# **Full Flow or Partial Flow Head**

Simple to Operate Extremely Port able SAE J1667 Compliant



The Model 6500 smoke (opacity) meter provides a simple and accurate means of detecting and measuring the opacity of smoke emitted by a diesel engine. It encourages proper maintenance for improved fuel economy and protection of the environment.

Used by fleets, regulatory agencies and OEM laboratories around the world.

#### **Design Features**

The Model 6500 consists of a sensor head (either partial flow or full flow) that connects to the control unit.

A light sensor reads the opacity of the emissions and relays the readings to the control unit's display. Both the SAE J1667 test ("snap-idle") and the "follow-mode" test (continuous readings under load) can be performed.

Test results can be printed individually on the system's impact printer. Up to 100 tests can be stored, or printed in a batch operation.

#### **Sensor Heads**

Both a full flow and partial flow sensor head are available. An extension pole with strong magnets allows the operator to take the measurement from the ground.

A pulsed green LED emitter as the monitor's light source ensures the  $\pm$  1% accuracy of readings in artificial light or even in direct light.

Each sensor head attaches to exhaust stacks of many different configurations, up to  $6" \varnothing$ . It employs a single pass system and has an operating distance of 7".

## **Connecting Cable**

A 25' flexible, single line cable allows complete mobility test bay or fleet maintenance areas. (\*25' extension available for testing busses).

#### **Control Unit**

The control unit is housed in a lightweight, weatherresistant aluminum case The front panel is a membrane keypad with eight tactile feedback push buttons. It can be placed in the cab for tests under load.

### **Display**

Easy to read, backlit alphanumeric liquid crystal display, prompts the operator through the test sequences. Battery condition will also be displayed through a series of colored LED's.

#### Power

12V sealed lead-acid cell; which operates approximately 40 hours before a recharge is required.

#### Accuracy

All readouts are within  $\pm$  one digit. Operating temperature 32° - 120° F. The unit is initially calibrated under clear stack conditions, with checks at 0% and 100% opacity. The meter can be precisely calibrated with a .2 neutral density filter, which is supplied with the system.

#### Reliability

Minimum drift, zero stability less than 1% per use. Pulsed green LED has infinite life expectancy. Resolution 1 digit (.01% of full scale). Meets SAE J1667 specification for full flow meters Appendix C using the required algorithm. Ambient Temperature correction (required in AZ) available through the software provided.

#### Low Maintenance

All solid state electronics. Lenses are accessible by simple snap closures. Baffle plates on interior faces of monitor help maintain lens cleanliness. External air connection ports.

## **Rugged Construction**

For portability and protection, the control unit is housed in a lightweight, weather-resistant aluminum case The control unit and all accessory items (except the extension pole) are packed into a lightweight, high impact plastic case. The total weight is approximately 25 lb.

## Warranty:

One year from date of purchase, parts and labor.

# Model 6500 System (Complete)

(full-flow sensor head) 194-6500C

Consists of:

Control Unit with recorder jack, printer interface

Stack Piece (7") source and detector Mounting Clamp Magnet and Band (for 5" Ø stack)

AC Adapter/Charger

Connecting Cable (25')\*

CPU Interface (software included)

Melles Griot Neutral Density Filter (.2)

Portable Impact Printer

**Extension Pole** 

Instruction Manual

Carrying Case

For additional 25' extension cable order Part No. 191-0011 (no extra charge with <u>original</u> order)

# Model 6500 "Basic" (Full Flow) 194-6500B

does not include the carrying case, extension pole, or printer.

# Model 6500 Smoke Meter (Complete)

with partial flow head 194-6500C-PF

includes all components listed above, however, the stack piece is a partial flow unit

For additional 25' extension cable order Part No. 191-0011 (no extra charge with <u>original</u> order)

# Model 6500 "Basic" (Partial Flow) 194-6500B-PF

does not include the carrying case or printer.

220V (export version) available on request No additional charge.

# Now Available:

# Partial Flow Head For your existing Model 6500

Allows testing even in adverse weather conditions, allows rapid attachment and accurate readings:

Bayonet (Straight) and Curved Nozzles \*Clamp available



P/N 194-0027

Includes lenses, curved and straight nozzles, extension pole.

P/N 194-0028

Includes extension pole, cured and straight nozzles



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