

# SSA 50 Compact



The SSA 50 is a state-of-the-art, professional light absorption partial flow Opacimeter for emission test of diesel vehicles.

It's specially designed for intensive use and single person operation, such as Vehicle Inspection or Professional Workshops. The vehicle test time is less than 3 minutes

## Functionality

The program includes two test modes: continuous gas sampling - full load/part load and free acceleration measurement. The values are displayed on the large LED displays.

- Automatic zeroing
- Linearity test

The acceleration test program can be customized according to country specifications and legislation.

## Measurement

The diesel smoke opacity is measured in smoke density % (also known as Hartridge HSU units) as well as in absorption coefficient  $k$  ( $m^{-1}$ ). The readings of the  $k$  and % opacity values are displayed simultaneously during operation on the large 1 inch LED display's.

## Flexible design

The flexible design with a small separate smoke head makes it easy to use on all sizes of vehicles such as cars, trucks, busses and others. The cable length between the smoke unit and the main unit is 10 m (or Bluetooth) and the LCD remote control cable is 5 m.

## Standards

The SSA 50 complies to ISO 11614 and 72/306/EEC.

## Accessories

The analyzer can be equipped with different RPM and Oil temperature options. Optionally the main unit can communicate with the smoke unit with Bluetooth

## Warranty

Warranty is 12 months

# SSA 50 Compact

	Range	Resolution	Accuracy
<b>Opacity</b>	0-99.9%	0.1%	2%
<b>K-value</b>	0-16.06 m <sup>-1</sup>	0.01 m <sup>-1</sup>	2% (calculated on opacity value)
<b>RPM</b>	0-9999 rpm	1 rpm/min	
<b>Oiltemp.</b>	0-160 °C	1 °C	
<b>Optical path length</b>	215 mm single path, corrected to 430 mm according to ISO11614.		
<b>Smoke chamber</b>	85 °C heated		
<b>Light source</b>	Green LED 565 nm		
<b>Detector</b>	Silicon photo diode		
<b>Sample probe</b>	1,4 m silicone hose with stainless steel probe		
<b>External connections</b>	RS 232 for PC-connection, I2C extended auxiliary port		
<b>Warm-up time</b>	Approx. 3 min.		
<b>Operating conditions</b>			
Temp	0 °C till +40 °C		
Relative humidity	up to 90%		
Atm. pressure	750 - 1 100 mBar		
Pressure range	0-10 kPa		
<b>Power supply</b>	10-30 VDC, 6A or 230 VAC with external power source		
<b>Size sample unit (WxHxD)</b>	375 x 180 x 75 mm (excl. stands)		
<b>Weight sample unit</b>	Approx. 5,5 kg (incl. stands)		
<b>Size main unit (WxHxD)</b>	420 x 190 x 350 mm		
<b>Weight main unit</b>	Approx. 6 kg		
<b>Options</b>			
RPM	Battery voltage measurement Piezo electric system incl. 6 mm clamp OBD RPM/OILTemp, values through vehicle's OBD diagnostic socket		
Bluetooth	Wireless communication between main unit and smoke meter		
Hose	5 m long hose electrically heated		



The hand held LCD remote control is used to operate the instrument and to input vehicle data before printout (optional)



With the option Battery RPM/Oiltemp the user obtains highly accurate measurements of vehicle's rpm's and oil temperature.