



SMART 1500

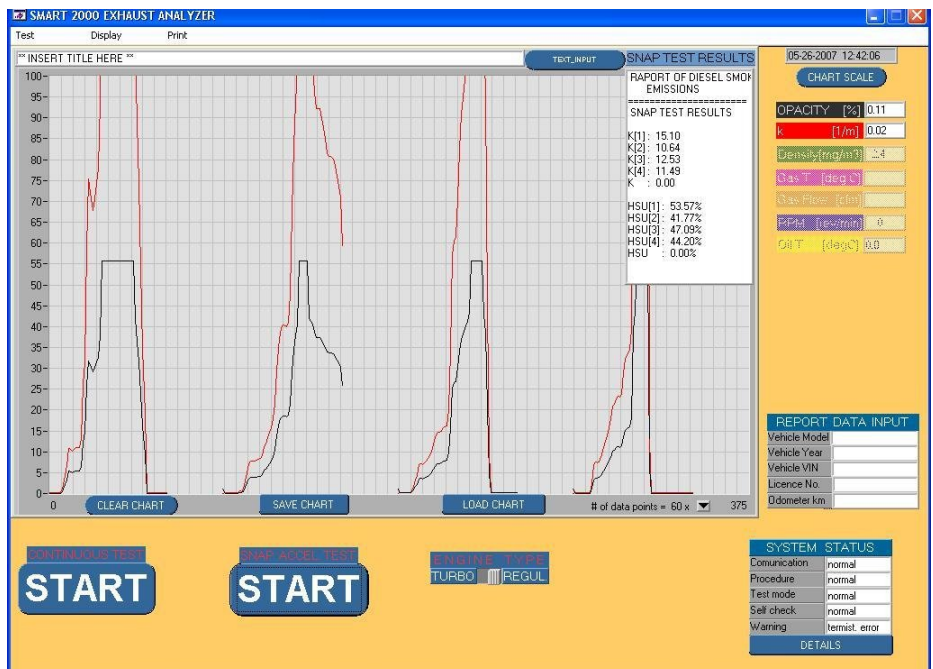
The SMART 1500 opacity analyzer is a fully computerized advanced optical opacity meter integrated into an automated and computerized diesel smoke emission analysis system. It is an accurate and repeatable system that complies to ISO and SAE J1167 standards, as well as with industry specific standards in Europe and North America. It is a portable and economical tool for garage inspection, field, laboratory, environmental control or research applications.



KEY FEATURES

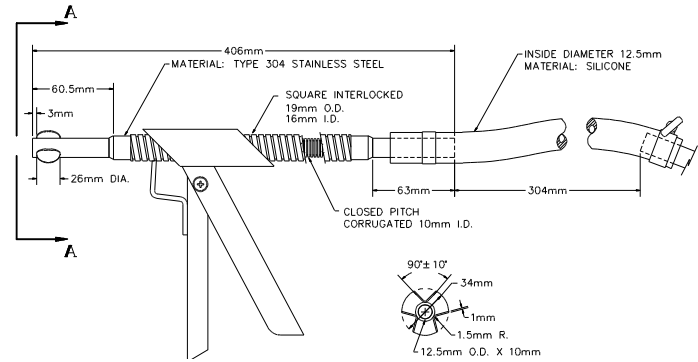
1. Partial flow continuous smoke sampling
2. Light absorption principle, temperature controlled
3. Vacuum based sampling system
4. Automatic zero and 50% span calibration
5. Automatic Free Acceleration Test to SAE J1667
6. Cigarette plug / battery based RPM/Oil T.
7. 100% US and Canadian Parts

The SMART 1500 uses the latest technology advances and industrial grade US made components for reliable operation and delivers continuous, fully automated testing performance time after time. ENVIRONMENT CANADA has tested and selected the SMART family of analyzers for their field emission testing. The easy to use PC control interface allows performing accurate emission tests within minutes.





Measuring Ranges	Accuracy/Performance
Opacity 0-100%	+/- 0.5% Absolute
Soot Density 0 – 10	+/- 0.5% Absolute
Temp. 0-200 Deg. C.	+/- 2% Relative
RPM 0-10,000 RPM	+/- 2% Relative
Environment	
Temperature	10-50 Deg. C.
Pressure	0-100 kPa
Humidity	95%
Thermal Stability	
Detector Temperature	45 Deg. Celsius – Temperature Controlled
Sample Cell Temperature	75 Deg. Celsius – Temperature Controlled
General	
Response Time	1 ms
Warm Up Time	8 min. Typical, 10 min. Max.
Reliability	20,000 hours
Zero/Span/Electrical Calibration	Prior to Every Test
Power	120/220 VAC 50/60 Hz, Max. 200 Watt
Dimensions/Weight	
Opacity Meter	38 x 23 x 10 cm - 4.5 kg
Host Computer Case	56 x 48 x 25 cm - 5.5 kg
International Standards	
ISO	11614
SAE	J1667
IEC	801-1/-2/-3/-4
NF R (FRANCE)	10-025
TUV (GERMANY)	SAFETY
SENSORS	9510-034



Sample Probe Assembly – flexible extension up to 3 m

Opacity Bench



Interconnection Panel