

MICRO-SMOKE MSA-PC

The world's most advanced emission system

PC base opacimeter with a diagnostic function for diesel engines, approved in accordance with ISO 11614, German(PTB)EO 18-09, ICE 801-1/-2/-3/-4 .



ASNETH 
Dutch Test Equipments

SMOKE TESTER

The Micro Smoke Tester MSA-PC is designed to measure the smoke emissions of diesel cars and trucks. The system meets any current national specification for emission inspection programs for diesel vehicles on the road. It is much smaller and lighter than most of the smoke transducers available on the market today, which makes it more economical to operate. MSA-PC offers a very fast measurement (response time) and modern smoke module ASN-2400 with a Short Warm Up Time.

Features

- ▶ Simple operation and easy maintenance
- ▶ Full color on screen including **Green/Red** colors, indicating the **Pass/Fail** state
- ▶ Optimized combination of software and hardware for rapid troubleshooting, qualified reparation and high saving time
- ▶ Connection capability with most modern RPM counter devices
- ▶ Can be upgraded with 5Gasmodule MGA-5 to complete emissions testing station
- ▶ Network capabilities (MicroNet, Bnet, ASA,...)
- ▶ OBD, EOBD Scan tools (optional) for various diagnostic like engine temperature, RPM...
- ▶ Documentation of all results via DIN A4 full color reporting
- ▶ Very fast measurement (response time)
- ▶ Long calibration interval once a year
- ▶ Low cost spare parts, accessories and consumables
- ▶ Price competitive
- ▶ Portable and suitable for roadside use
- ▶ Ultra short warm-up time
- ▶ Distinctive after-sales service and assistance
- ▶ High accuracy
- ▶ One probe for all exhaust pipe diameters
- ▶ High service life of measuring chamber
- ▶ Linearity test function



MicroSmoke Mobile for road-side use

A test in the shortest of time

Are you looking for an opacimeter which satisfies all your requirements, including quick run-up times, short measuring periods, high measurement accuracy, use-friendliness, which is simultaneously in according with the latest legislation?

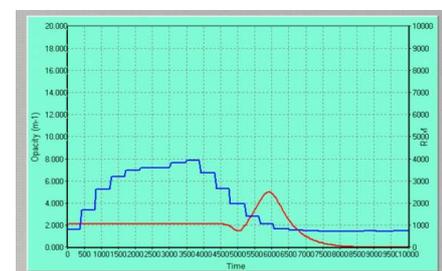
Here is it, the MSA-PC from Asneth technologies: A great innovation by Asneth (the Netherlands) that provides all the distinctive features mentioned above



Clearly graphic interface



Step by step test routines



Diagnostic function

MICRO-SMOKE MSA-PC

Technologies of future available today.



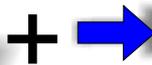
engine speed RPM-2000

RPM B+ /B- trigger and vibration.
 RPM -2000 from Asneth is an universal rpm meter (tachometer) suitable for 2 stroke or 4 stroke petrol engines and diesel engines of any size
 The measurement methods are: alternate current residual ripple and engine vibration.
 The unit is equipped with 4 digits LED, temperature Sensor.
 Number of cylinder can be preset for correct measurement.
 Transmission using cable or Bluetooth (optional)

5 Gas nodule MGA-5
 Can be upgraded with exhaust gas module to complete emission testing station MCA-PC.



Gasmodule MGA-5



Complete Emission test station MCA-PC



RPM status



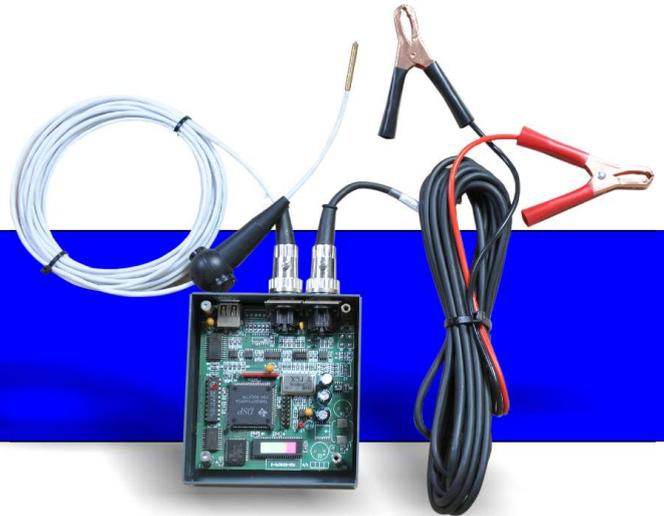
Machine status

FINAL RESULT: OK				
	Opacity	RPM	Temp	tA (ms)
C0	-0.00 #	3310	31	859
C1	8.34 #	2750	31	1312
C2	4.84 #	3130	31	859
C3	4.85 #	3110	31	860
C4	-0.00 #	3200	31	454
C5	-0.00 #	3280	31	844
C6	2.12	3360	31	875
C7	2.10	3210	31	1312
C8	2.11	2830	31	891

Test Results



Smoke meter module ASN2400



Asneth RPM counter CAP 8510

Technical data:

Power supply: 230V-50-60 Hz 0,8 A 12V/110V(optional)
 Storage temperature: -32°C - 55°C
 Operating temperature: +5°C - +40°C
 Relative humidity: max < 95% non-condensing
 Warm-up time: Ca. 3min.
 Effective Optical Path Length: 364 mm
 Chamber heating: 100°C
 Response time: 1msec

	Exhaust gas module	trolley
Dimensions:	23.5 cm x 38 cm x 9 cm	W66 x D63 x H120 cm
Weight:	4,5 kg	48 kg

Oil temperature	Measured quantity	Measurement range	Resolution
Opacity		0...99,9 %	0,1%
Absorption (k-value)		0...99,99 m-1	0,01 m-1

Oil temperature	Measured quantity	Measurement range	Resolution
Temperature		0-200°C	1°C

Engine Speed RPM	Measured quantity	Measurement range	Resolution
RPM		200- 9,990	10 rpm

Standard equipment supplied

- Smoke meter module Asneth 2400
- car/truck sampling probe
- MSA-PC software
- Dongle
- Pentium PC
- LCD monitor wide 22 inch
- PC key board
- PC mouse
- A4 colour printer
- RPM counter CAP-8510
- B+B- Cable
- Oil temperature sensor, cars, trucks
- Trolley

Optional

- 5 Gas module MGA-5Gas
- RPM-2000 B+B- counter with vibration sensor, oil temperature
- EOBD module
- Calibration attenuator 50%
- CAP-8510 vibration sensor

Your Distributor

