

Opacimeter module AT605



- The method is based on measuring the attenuation of light beam in a cell filled with the measured smoke.
- Both steady-state and acceleration measurements are possible.
- The acceleration test (obligatory during the emission inspection) registers the idle and overspeed revolutions, acceleration time and peak opacity.

Opacimeter AT605 set includes

- Sampling unit LCS 2400 with portable stand
- Software AT605
- Sampling probe diameter 10 mm
- Connection cable AT605
- RPM and temperature measurement is not included in the set
- Host computer (PC or Laptop) is not included in the set

Option

- RT Module 2 (RPM and Temperature sensor)
- Multi-Diag (RPM and Temperature measurement on OBD systems)
- Sampling probe diameter 27 mm (for the vehicle with exhaust pipe up to diameter 70 mm)
- IR remote control
- Converter RS232-USB / GENERIC

Requirements for PC

- Windows 7/8/10
- Free RS232 port
RS232-USB/Generic converter (AT119 4001) required for USB connection – see option



Specification

Measured quantity	Range	Resolution	Accuracy
Absorption coefficient (k)	0 – ∞ m ⁻¹	0,01 m ⁻¹	± 0,15 m ⁻¹ ; ± 0,30 m ⁻¹
Opacity (N)	0 – 100 %	0,1 %	± 2 % absolute
Acceleration time	0 – 99,99 s	0,1 s	± 0,2 s

Acceleration measuring according to directive ECE R24

Option – RT Module 2 or OBD

Measured quantity	Range	Resolution	Accuracy
Temperature	0 – 150 °C	1 °C	± 2 °C
RPM	400 – 2000 min ⁻¹ 2001 – 9990 min ⁻¹	10 min ⁻¹	± 20 min ⁻¹ ± 2 % RV

RV = of read value) in range 0,0 to 2,5 m⁻¹
) in range 2,5 to 4,0 m⁻¹

Input Power (sampling unit)230 V AC +10% / -15%; 0,78 Amp, 50/60 Hz
 Sample cell Temperature75 °C ±1°C
 Effective Optical Path Length (EOPL).....364 mm
 Startup time15 minutes @ 20°C ambient

Operation Temperature+5 to +40°C
 Operation Humidity0 to 95% RH
 Storage Temperature-32 to 50 °C

Communication interface RS232 (USB optional)

Weight (sampling unit)4,5 kg max.
 Dimensions (sampling unit).....235 x 380 x 90 mm max.
 (height x width x depth)