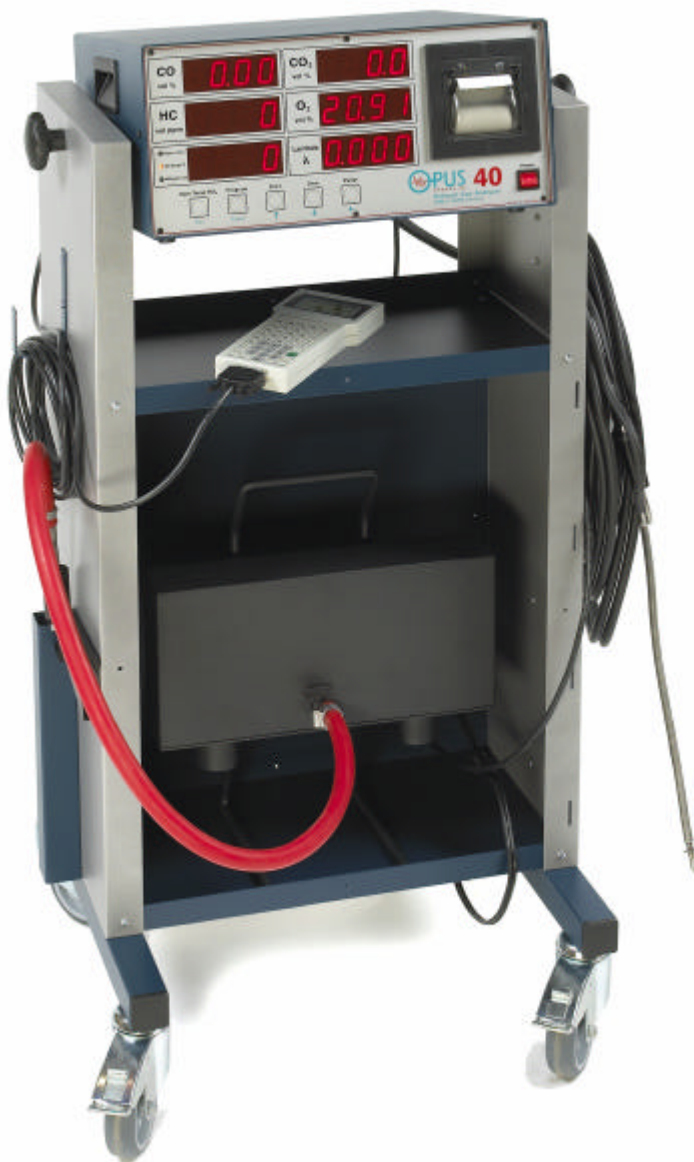


OPUS 40/50-D Combi analyzer

OPUS 40/50-D is the latest Combi version of the popular OPUS 40/50 series that has been produced in over 5000 units since 1994.

It has; easily read large 1 inch LED displays as well as a hand held LCD remote control. Professional design – robust very easy to use with many automatic functions, such as auto zeroing, automatic gas calibration, leak test, HC residual test and electronic linearity test

OPUS 40/50 is made in Sweden, based on best available components of industrial quality for testing (Petrol/LPG/Diesel) cars, motorcycles, mopeds as well as trucks and busses at Vehicle Inspections and Professional Workshops.



- **WPS “Water Protection System”:** Protecting the gas optical bench from getting defect by water.
- **EOBD-interface:** Enables connection of the OPUS OBD Controller to the analyzer. EOBD test and emission test on one printout.
- **Build-in Hi-Speed Thermal Printer:** Gas, smoke values and EOBD-status. Hi-Lo test program and printout according to 96/96/EEC.
- **Customization:** Can be programmed for all legislations according to country specifications.
- **Optical bench:** Solid state detector, OIML class 0 (highest class) with the latest technology and highest accuracy.
- **Reliability:** 12 months calibration interval for gas.

More than 600 units of OPUS 40 Gas Analyzer are in use since 1997 at the Swedish Motor Vehicle Inspection Co (Svensk Bilprovning)

The OPUS 40 has a flexible design and is available as 3-, 4- or 5-gas analyzer with NOx.

A built-in real time clock calendar with printout of time and date is standard. User manual is included. A mobile stand is available as option.



A hand held alphanumeric remote LCD terminal is included. This terminal is used to operate the unit in diesel test mode as well as to input vehicle information for printout and guide the user through the test program

Technical Data Diesel Smoke:

	<u>Range</u>	<u>Resolution</u>	<u>Accuracy*</u>
Opacity	0 - 100 %	0,1 %	2 %
k	0 - 99,99 m-1	0,01 m-1	2 %
Rpm	0 - 9999 r/m	1 1/m	
Temp	0 - 160 °C	1 °C	

*Or 5 % of reading

Warm-up time: Approx. 3 minutes
Pressure range: 0-10 kPa
Measuring chamber: Heated controlled to 75 C
Optical path length: 215 mm.
Source light: Green LED (560 nm)
Detector: Silicon photo diode

Externals: RS232 (Optional: OPUS DSS PC management SW for storing test data)

Hose: 1,4 m with stainless steel Probe

Optionals:

RPM: Piezo Electric System, incl. 6 mm clamp or Battery voltage measuring system.

Oiltemp: Sensor for oil dip-stick or IR Temp (see specific leaflet).

Power supply: 12 VDC, 6 A and 220 VAC. 50 Hz. 0,3 A, 10 meter power supply cable.

Size (WxHxD):

Measuring unit 375 x 180 x 75 mm.

Weight:

Measuring unit approx. 5,5 kg incl. stand



OPUS 40/50 is meeting the OIML Class 0 specifications and is OIML class 1 certified.



Technical Data 4/5-gas:

	<u>Range</u>	<u>Resolution</u>	<u>Accuracy*</u>
CO	0 - 10 vol. %	0,01 vol. %	0,02 vol. %
HC	0 - 20 000 vol. ppm	1 vol. ppm	4 vol. ppm
CO ₂	0 - 20 vol. %	0,1 vol. %	0,3 vol. %
O ₂	0 - 25 vol. %	0,01 vol. %	0,1 vol. %
Lambda	0,6 - 1,7	0,001	
AFR	0-35		0,01
NOx	0 - 5000 vol. ppm	1 vol. ppm	25 vol. ppm
Rpm	0 - 9999 r/m	1 1/m	
(2/4 stroke)			
OilTemp	0 - 160 °C	1 °C	
Deviation	Maximum 0,6 % of full-scale deflection the first operating hour. Maximum 0,4 % per hour thereafter.		

*Or lowest 3 % of reading

Warm-up time: < 5 minutes at 20 °C.
Response time: < 5 sec. to 95 % of meas. value.
Pump capacity: 5 liters / minute, minimum.
7 liters / minute, nominal.

Max exhaust gas temp: 400 C

Hose and Probe: 7 m gas sampling hose with stainless steel probe

Optical bench: Non-dispersive infrared principle (NDIR), Solid state detector

MPU: 16 bit micro processor

Printer: Thermo Printer

Externals: RS 232 (For optional OPUS EES/DSS PC SW)

2x Accessories connectors

Optionals: RPM: Inductive pick up w. 5 m cable or Battery voltage sensor w. 4 m cables.

Oiltemp: Probe for oil dip-stick or IR Temp (see specific leaflet) w. 5 m cable

Sound level: 42 dBA at 1 meter's distance and the pump turned off.

45 dBA at 1 meter's distance and the pump turned on.

Power supply: 220-240 VAC. 50-60 Hz. 0,3 A (12 VDC with optional Inverter)

Size (WxHxD): 420 x 190 x 350 mm.

Weight: Approx 12.5 Kg

Operating cond: Temperature: +5 to + 48 °C

Rel. air humidity: up to 90 %

Atmosph. Ambient pressure:

750 mbar – 1100 mbar

Power variation: 230 VAC -15% to +10%

50 Hz +/- 2%

12 Months warranty