



## COMBI TESTER

VP 135205

Emission Tester Combi Emission Tester, Stand-Alone

### DESCRIPTION:

#### MGT 5:

- ◆ Low current emissions tester without display (basic unit) for the analysis of HC, CO, CO<sub>2</sub>, O<sub>2</sub> emissions with calculation of Lambda
- ◆ Automatic switch-off (prevents condensed water from penetrating test chamber)
- ◆ Separate pump for separation of condensed water
- ◆ Emission testing of CNG, LPG and Otto engines possible
- ◆ Display of measured values via PC/laptop monitor (option)
- ◆ Options:
  - Can be expanded to measure NO
  - LED-display module (as additional slave monitor)
- ◆ Automatic self-check<sub>2</sub>, O<sub>2</sub> emissions with calculation of Lambda

#### MDO2-LON:

- ◆ Official German PTB-approval 18.09
- ◆ Complies with ECE R24, ISO 3173 and ISO/TC22/SC 5 N 650 provisions and guidelines.
- ◆ Time-saving trouble-free testing and diagnosis of emission turbidity using partial current procedure with free acceleration or with engine under load
- ◆ Single testing or continuous testing
- ◆ Integrated test chamber temperature sensor
- ◆ High-powered test chamber heating
- ◆ Oil temperature & RPM recording
- ◆ 2 serial RS 232 connections for
  - hand terminal or PC
  - external testing equipment (LPS 2000)
- ◆ Display of test values via PC/laptop monitor (option)
- ◆ Exhaust-emitting parts made of high-quality stainless steel
- ◆ Sealed with heat-resistant synthetic material

### STANDARD DELIVERY:

#### MGT 5:

- ◆ Basic gas analyser in strong steel housing and painted in RAL 5010, blue
- ◆ Combined water separator and main filter unit
- ◆ Active carbon filter, calibration gas connection, external O<sub>2</sub> sensor, emissions probe made of 400 mm woven steel with holding clamp and sealing plugs, emissions probe (8 m) with pre-filter, hose for condensed water escape, instruction manual, approval certificate
- ◆ USB control module interface cable
- ◆ 3 m USB interface cable
- ◆ Measurement software without country-specific emissions testing procedure

#### MDO2-LON:

- ◆ Stainless steel construction with protective plastic casing
- ◆ Turbidity test cell with optical measurement
- ◆ 230 V power supply
- ◆ RS 232 connection
- ◆ Emission probe for cars with hose (length 1.5 m), max. 300 degrees C
- ◆ 17 m connection cable for test lane connection

#### MGT 5 and MDO2-LON:

- ◆ Software Terminal-/Basic Program (Profi-/Eurosystem for cars):
  - Manual data entry
  - Automatic data transmission of external equipment
  - Terminal networking with PC-network
  - Connection to asanetwork possible
- ◆ Packing included

## TECHNICAL DATA:

### MGT 5:

Measurable gases	HC, CO, CO <sub>2</sub> , O <sub>2</sub> , NO (Option)
Measuring principle Infrared spectrometry	HC, CO, CO <sub>2</sub>
Measuring principle Electrochemical detection	O <sub>2</sub> , NO
Warm-up time	480 s
Flow	3,5 l/min
Working pressure	0,75 bar - 1,1 bar
Accuracy class	O (OIML)
On-board voltage	12 V / 42 V
Power supply	1/N/PE 85 V/285 V 50 Hz
Dimensions total (L x W x H)	240 mm x 560 mm x 300 mm
Weight	10 kg
CO - Measurement range / Measured value resolution (max.)	0 - 15 % Vol. / 0,01
CO <sub>2</sub> - Measurement range / Measured value resolution (max.)	0 - 20 % Vol. / 0,01
HC - Measurement range / Measured value resolution (max.)	0 - 9999 ppm / 0,1 (Hexan) 0 - 20000 ppm / 1 (Propan)
O <sub>2</sub> - Measurement range / Measured value resolution (max.)	0 - 25 % Vol. / 0,01
Lambda (calculated)	0,5 - 9,99 / 0,01
NO (Option) - Measurement range / Measured value resolution (max.)	0 - 5000 ppm / 1

### MDO2-LON:

Measurement principle	absorption photometry
Wave length of the spotlight	567 nm
Measurement chamber length	430 mm
External/Internal diameter of test chamber	28 mm / 25 mm
Warm-up time of the measurement chamber approx.	180 s
On-board voltage	12 V / 24 V
Power consumption average/max.	0,11 kW / 0,13 kW
Power supply	1/N/PE 230 V 50 Hz
Dimensions total (L x W x H)	230 mm x 550 mm x 245 mm
Weight	13 kg

## ACCESSORIES:

VZ 911358	PC/Test Lane Module for Combi Emissions Tester
VZ 910177	Industrial PC Compact
VZ 910052	PC-Keyboard and Mouse
VZ 910165	PC Flat Screen 22 inch (TFT Standard)
VZ 910091	DIN A4 Ink Jet Colour Printer
VZ 910167	USB/RS 232 Converter for Connection to PC
VZ 911059	RPM Module for MGT 5
VZ 990446	MGT 300 EVO
VZ 990281	RPM extension cable (4 m) for magnetic sensor
VZ 990284	RPM extension cable (4 m) for battery

VZ 990282	RPM cable for Power Supply
VZ 990283	RPM-Power Supply
VZ 990439	AVL DITEST SPEED 2000
VZ 910138	RPM Power Supply for AVL DISPEED
VZ 911205	RPM extension cable (5 m) for combi sensor
VZ 990211	Trigger Clamp for MGT 5
VZ 990230	Diagnostic Cable IVECO (MDO2-LON)
VZ 990289	Diagnostic socket adapter cable f. IVECO
VZ 990227	MDO2-LON TDC-Sensor Cable
VZ 990113	MB-Revolution Converter
VZ 990114	MB Connector for Impulse Counter
VZ 990231	MB-Universal Connector
VZ 990124	MB-Adapter cable for commercial vehicles
VZ 990134	MB-Adapter cable for BR400 EDC
VZ 990290	MB RPM-Determination
VZ 990255	RPM Smart CDI Box
VZ 911361	MAHA VCI (W-LAN) wireless OBD module
VZ 990225	Oil temperature sensor for cars
VZ 990226	Oil temperature sensor for cars and trucks
VZ 980012	Additional Charge for Exhaust Probe 600 °C
VZ 980027	Diesel Emission Probe for Cars, max. 650 °C
VZ 980025	Emission probe f. Northern Ireland & Costa Rica
VZ 980022	Emission probe for trucks 300 °C MDO2-LON
VZ 980023	Emission probe f. full power testing 600 °C
VZ 980030	Emission probe f. cars max. 750 °C
VZ 980033	Exhaust probe MGT 5 for cars/motorcycles
VZ 990262	Holder for Truck Emission Probe (Vertical Stacks)
VP 975479	Trolley for single or combi tester
VZ 911065	Software target data for AU I, AU II with OBD
VZ 990210	NO-Sensor for MGT 5
VZ 975232	Pressure controller with mini-can calibr. bottle
VZ 990245	Power Pack for MGT 5
VZ 990048	Cable for on-board power supply 12/24 V
VZ 990098	Cable (5 m) for Connection 12/24 V
VZ 990125	Gauge Cable Diameters
VZ 970001	Calibr. filter approx. 50% (grey disk with frame)
VZ 990357	Special calibration filter ca. 25% for maintenance
VZ 990107	Calibr. filter for repair ca. 50%
VZ 990358	Special calibration filter ca. 70% for maintenance
VZ 990208	LED-Display Module
VZ 975533	Connecting Kit of Motorcycles via MGT
VZ 975536	Connecting Kit for Exhaust Suction System