GAS TESTERS AND SMOKE METERS

TECNOMOTOR ®

THE EXHAUSTIVE EXHAUST EMISSION TESTING RANGE

GAS 810 P/N 0-64500101

GAS 830 P/N 0-64500201

GAS 830 PLUS P/N 0-64500502

OPA 820 P/N 0-64500301

OPA 840 P/N 0-64500401

OPA 840 PLUS P/N 0-64500601

EXHAUST GAS TESTERS

The new range of **Exhaust Gas Testers** is born from **Tecnomotor** experience.

The new exhaust gas tester modules series 800 have been designed to offer **high reliability and accuracy in heavy duty applications**. Their stringent design criteria enabled them to obtain certifications to major international standards, such as OIML Class 0 and MID 2004/22/EC.

Thanks to a broad range of options and accessories, they are **able to meet all the needs arising from overhaul lines or a repair workshop**. The series includes both stand-alone test modules (with LCD, keypad and printer) and measurement modules for interfacing portable display units or PCs via cable or Bluetooth connection (up to 300-m transmission range in free space).

The units can be equipped with internal backup batteries ensuring instrument operation.

OIML Classe 0
ISO 3930/OIML Classe 0

MID approval
MID 2004/22/CE

SMOKE METERS

The new **Smoke Meters for Diesel engines Series 800**.

The new smoke meter chamber developed by Tecnomotor retains the reliability and measurement accuracy of its predecessors in heavy-duty applications (such as trucks and agricultural machinery) packaged in a compact design and topped with energy-saving features.
Advanced electronics and software algorithms eliminate the need to calibrate internal optics - all that is required as far as maintenance goes is one single yearly inspection.
Like their gas tester counterparts, these units come **in a broad range of configurations to meet the most diverse needs**, such as:
- Gas sampling (for instance using suitable sensors for raised bus exhaust pipes).
- Wireless display unit lets you test from the driver's seat with not need to get off the vehicle between accelerations.
- Integrated batteries in measurement modules eliminate the need for power supply cables.
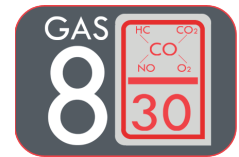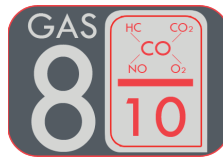
ISO 11614

CAR BUS TRUCK MOTO VAN

Made in Italy

EXHAUST GAS TESTERS

GAS 810

Stand-Alone Gas Tester capable of performing standard-compliant tests thanks to:
- 16-key multifunction keyboard
- White-LED backlit LCD, 4x20 9-mm characters
- 24-column thermal printer

The 810 model may be connected to the PC via cable or Bluetooth connection.

GAS 830

Exhaust gas analysis unit to be integrated with display unit
(PC, via cable or Bluetooth connection, wireless display), specific for overhaul line.

GAS 830 PLUS

Exhaust gas measurement/analysis unit complete with:
- Exhaust gas tester with 24-column printer, integrated battery and Bluetooth module
- Battery-fed wireless display unit
- Trolley for easy handling

TECHNICAL FEATURES

- **Dimensions:** 23 x 34 x 22.5 cm
- **Power supply:** 220/110V - 50/60 Hz 30 W
- **Operating temperature:** 5 – 40 ° C
- **Storage temperature:** -20 – 60 ° C
- **Pressure:** 850 hPa – 1025 hPa
- **Humidity:** 0% RH – 95 % RH
- **Maximum warm-up time:** 3 min.
- **Reset:** Electronic and automatic by means of solenoid valve
- **Oil temp.:** 0 –150°C Res.1° C
- **CO range:** 0 – 10% Vol Res. 0.01% Vol

- **CO2 range:** 0 – 20% Vol Res. 0.1% Vol
- **HC range:** 0 – 20000ppm Vol(optional) Res. 1 ppm Vol
- **O2 range:** 0 – 21% Vol Res. 0.01% Vol
- **LAMBDA factor:** 0 – 2 Res. 0.001
- **NOx range**: 0 – 5000ppm Vol(optional) Res. 1 ppm Vol
- **Weight** (with internal battery): less than 15 Kg
- **Metrology standards**: OIML Class 0, MID 2004/22/EC

STAND-ALONE WIRELESS CONFIGURATION

Includes:
- Exhaust gas tester model 830Plus with 24-column printer, trolley, internal battery and Bluetooth connectivity
- Smoke meter model 840Plus with 24-column printer, trolley, internal battery and Bluetooth connectivity
- Portable display unit with lithium battery and Bluetooth connectivity

To be supplemented with application-specific oil temperature sensor and rev counter selected from range of accessories

SMOKE METERS

OPA 820

OPA 840

OPA 840 PLUS

Stand-Alone Smoke Meter capable of performing standard-compliant tests thanks to:
- 16-key multifunction keyboard
- White-LED backlit LCD, 4x20 9-mm characters
- 24-column thermal printer

The 820 model may be connected to the PC via cable or Bluetooth connection.

Exhaust gas analysis unit to be integrated with display unit
(PC, via cable or Bluetooth connection, wireless display), specific for overhaul line.

Smoke opacity measurement unit complete with:
- Smoke meter with 24-column printer, integrated battery and Bluetooth module
- Battery-fed wireless display unit
- Trolley for easy handling

TECHNICAL FEATURES

- **Dimensions:** 23 x 34 x 22.5 cm
- **Power supply:** 220/110V - 50/60 Hz 30 W
- **Operating temperature:** 5 – 40 ° C
- **Storage temperature:** -20 – 60 ° C
- **Pressure:** 850 hPa – 1025 hPa
- **Humidity:** 0% RH – 95 % RH
- **Maximum warm-up time:** 5 min.
- **Reset:** Electronic and automatic by means of solenoid valve
- **Oil temp.:** 0 –150°C Res.1° C
- **Absorption coefficient K (m-1):** 0 – 9.99 m-1 Res 0.01 m-1

- **Absorption rate N (%):** 0 – 99.9 % Res 0.1%
- **Acceleration time:** 0 – 5 s. Res 0.1s
- **Fume temperature:** 0 ÷ 150 °C. Res1°C
- **Actual chamber length:** 296 mm
- **Chamber temperature**: 75 °C
- **Light source:** Green LED
- **Weight** (with internal battery): less than 15 Kg
- **Metrology standard**: ISO 11614

"BRAVO" CONFIGURATION

Includes:
- Exhaust gas tester model 830 with trolley, internal battery and Bluetooth connectivity
- Smoke meter model 810 with trolley, internal battery and Bluetooth connectivity
- PC with LCD, printer, Bluetooth module and PC trolley

To be supplemented with application-specific oil temperature sensor and rev counter selected from range of accessories

ACCESSORIES

REV COUNTERS

A

B

D

C

A > 8-64500012	Plug-in RPM reader, connects to diagnostic socket (optional battery)
B > 8-63500007	Vibration sensor
C > 8-64500016	Cable for rpm detection
D > 8-63500002	Oil Temperature Sensor

TROLLEY

E

F

E > 8-64200134	Single Trolley
F > 8-64200135	Double Trolley

OTHER ACCESSORIES

G

H

I

L

M

G > 8-63500011	Pastorale TRUCK sensor
H > 8-64200009	Motorbikes gas pick-up kit
I > 8-64500006	NO Sensor
L > 8-64500003	Bluetooth wireless communication kit GAS
L > 8-64500009	Bluetooth wireless communication kit OPA
M > 8-64500001	Battery for installation into gas testers and smoke meter, duration above 4 hours

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