

EMISSIONS Analysis

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TEXA





FUTURE-PROOF SOLUTIONS FOR PTI CENTER

Exhaust gas analysis is one of the most delicate and important phases in the mandatory testing of old and new motor vehicles. In recent years, advances in technology have led to the development of vehicles that are far more efficient in terms of exhaust gas emissions. Even these vehicles, however, need to be tested and certified to ensure that their emissions remain within the limits established by law. As time passes, emission limits are also becoming stricter, requiring the use of advanced technology to carry out the necessary tests.

The demand for exhaust gas analysis tools is therefore constantly growing, not only from authorised vehicle test centres but from conventional garages too. TEXA has the solutions to satisfy that demand.

TEXA's innovative exhaust gas analysis products are designed for use by test centers and garages performing pre-test checks. These easy to use tools incorporate TEXA's own, patented measuring technology and ensure accurate and reliable exhaust gas analysis in conformity to the latest emission control standards.

Bluetooth communication technology and TEXA's Autopower battery technology mean that these tools can be used without any awkward cables. All TEXA exhaust gas analysis tools come with a practical trolley for easy mobility around the workshop without having to lift and carry them.

GASBOX AUTOPOWER

EXHAUST GAS ANALYSER

GASBOX Autopower is an exhaust gas analyser for the measurement of CO, CO₂, O₂, HC (and optionally NO) in petrol and gas fuelled vehicles. It is equipped with a practical trolley for easy movement around the workshop. Standard Bluetooth connectivity and the optional Power Pack (external battery pack) make it possible to use this analyser in a totally wireless way. The analysis chamber in GASBOX Autopower is designed and patented by TEXA and guarantees accurate and correct measurement of all polluting emissions.

GASBOX Autopower is homologated according to 2004/22/EC, the Measuring Instruments Directive, and conforms to the requirements of OIML R99. GASBOX Autopower is also homologated for use in various countries around the world.

It comes complete with ETS software for managing emission tests according to various international standards.



Technical Specifications	GASBOX Autopower
Dimensions:	460 x 200 x 250 mm
Approximate weight:	6.5 Kg
External power supply:	100-240 V, 50-60 Hz
Temperature range:	5 °C a 40 °C

Measurements	Measurement range	Resolution
CO	0 - 10% vol.	0.01%
CO ₂	0 - 20% vol.	0.10%
HC	0 - 10.000 ppm	1.0 ppm
O ₂	0 - 22% vol.	0.010%
NO _x (optional)	0 - 5.000 ppm	1.0 ppm
Lambda	0 - 5	0.001
CO _{corr}	0 - 10%	0.01%

OPABOX AUTOPOWER SMOKEMETER

OPABOX Autopower is TEXA's solution for measuring the opacity of exhaust smoke from vehicles powered by diesel engines.

OPABOX Autopower is equipped with a practical trolley for easy movement around the workshop. Standard Bluetooth connectivity and the optional Power Pack (external battery pack) make it possible to use this opacity meter in a totally wireless way. OPABOX Autopower's sensors

can measure the opacity of fumes from light and heavy vehicles. The OPABOX Autopower opacity meter is homologated according to the latest standards and comes complete with ETS software for managing emission tests according to various international standards. ETS software is available in 24 languages.



Technical Specifications	OPABOX Autopower
Dimensions:	460 x 200 x 250 mm
Approximate weight:	6.5 Kg
External power supply:	100-240 V, 50-60 Hz
Temperature range:	5 °C a 40 °C

Measurements	Measurement range	Resolution
Opacity	0 - 100%	0.01%
Absorption coefficient	0 - 10 m ⁻¹	0.05 m ⁻¹

EMISSIONS ANALYSIS ACCESSORIES



Power Pack



Recharge station



ECO STATION

RCM

MOTORBIKE REV COUNTER

This practical and handy wireless tool lets you measure motorbike RPM as fast as possible.

RCM (REVOLUTION COUNTER for MOTORBIKES) is an innovative new tool from TEXA that allows vehicle test centres to accurately measure engine speed on L category vehicle. RCM uses an integrated antenna to measure the frequency of ignition at the engine's spark plugs. RCM therefore does away with the need to connect cables and sensors to inaccessible points on the bike, and guarantees practicality and ease of use instead. Compared to conventional rev counters, RCM dramatically reduces testing times. RCM is powered by its own rechargeable batteries. The number of cylinders and the number of strokes can be set from the tool's own keypad or using PC software. Engine speed is displayed on the tool's own practical graphic display. RCM confirms the correctness of engine speed readings by means of a green LED at the top of the unit. Readings can be transmitted to the ETS graphic interface software either via Bluetooth or via an RS232 serial cable. RCM is the perfect complement to TEXA's RC3 and RC2 rev counters and is also ideal for use in vehicle test centers.



Technical Specifications	RCM
Dimensions:	204 x 210 x 117
Approximate weight:	290 g
External power supply:	Batteria int. - 5 V ext.
Temperature range:	-10 °C ÷ 50 °C

Measurements	Measurement range	Resolution
RPM	650 - 9999	1
Oil temperature	0-199 °C	1 °C





RC2

CAR REV COUNTER

RC2 is TEXA's rev counter for measuring engine speed on cars and light commercials. It comes with a battery ripple sensor that uses the residual signal from the alternator combined with sound frequency analysis to measure engine speed. An optional inductive clamp is also available to measure engine speed on older petrol fuelled vehicles without integrated coils, as well as a piezoelectric sensor for use with first generation diesel engines.

The RC2 casing incorporates a magnet for safe attachment to the bonnet. RC2 is powered directly from the vehicle's own battery. An LED lights and a buzzer sounds to confirm the correct reading of engine speed. Engine speed data can be transmitted to the graphic interface either via an RS232 serial cable or over the practical Bluetooth link.



Technical Specifications	RC2
Dimensions:	250 x 100 x 40 mm
Approximate weight:	400 g
External power supply:	12 V
Temperature range:	0 °C ÷ 45 °C

Measurements	Measurement range	Resolution
RPM	100 - 9999	1
Oil temperature	0 - 200 °C	1 °C

RC3

UNIVERSAL REV COUNTER

RC3 is TEXA's universal rev counter, developed especially for use in vehicle test centres. It is ideal for measuring engine speed on light and heavy vehicles. RC3 comes with two separate data acquisition systems to ensure compatibility with all kinds of vehicle. RC3 can take battery ripple readings from most vehicles, and can connect to the OBD socket on all vehicles homologated from Euro 3 on.

An optional inductive clamp is also available to measure engine speed on older petrol fuelled vehicles without integrated coils, as well as a piezoelectric sensor for use with first generation diesel engines.

RC3 is powered directly from the vehicle's own battery. Engine speed data can be transmitted to the graphic interface either by RS232 serial cable, by USB cable or over a practical Bluetooth link.

RC3 can also be used as an EOBD scan tool to analyse engine parameters related to emission control.

RC3 supports the following EOBD protocols: ISO 9141, KW2000, PWM, VPW, CAN BUS and the recent WWH-OBD. WWH-OBD protocol also allows the tool to interface with the latest Euro 6 trucks.



Technical Specifications	RC3
Dimensions:	155 x 162 x 63 mm
Approximate weight:	800 g
External power supply:	8 - 32 V
Temperature range:	0 - 45 °C

Measurements	Measurement range	Resolution
RPM	0 - 9999	1
Oil temperature	0 - 200 °C	1 °C

GAS MOBILE

GAS Mobile is a lightweight and compact portable device featuring a high-visibility graphic LCD display used to test all types of engines, running on petrol, diesel or alternative fuels. It exploits Bluetooth wireless technology to communicate with OPABOX Autopower and GASBOX Autopower and with the RC2 and RC3 engine speed and temperature gauges. The lithium-ion batteries offer a full day's autonomy, meaning the device does not need to be plugged into the mains or the vehicle's power supply, and can be conveniently used inside the vehicle.

GAS Mobile also features a practical docking station that can be fixed to the measurement instrument trolley. The docking station serves as a practical support and also allows the device's internal battery to be recharged from the adapter connected to the instrument recharge system.



Technical Specifications	GAS Mobile
Dimensions:	210 x 160 x 120 mm
Approximate weight:	800 g
External power supply:	100-240 VAC, 50/60Hz - 12V
Temperature range:	0 - 45 °C





MULTI PEGASO

MULTI PEGASO is TEXA's exhaust gas analysis station for all high-level workshops. MULTI PEGASO incorporates latest generation hardware as well as a LAN connection, Wi-Fi and Bluetooth. It features a 19" inch LED monitor with True-To-Life Picture technology for optimised management and control of emission tests. MULTI PEGASO also comes with an A4 format multifunctional colour printer, conveniently housed in a dedicated compartment. The bottom of the station contains two compartments for GASBOX Autopower and OPABOX Autopower, along with their trolleys. These compartments provide automatic battery recharging facilities via connectors at the back. The station comes with the Windows 7 Embedded operating system with integrated ETS software for managing exhaust gas measurements and tests. Exhaust gas tests can also be managed via a practical remote control, supplied as standard.

CS 9000

CS9000 is TEXA's special exhaust gas analysis solution for bikes, scooters and quads, designed for use in conjunction with GASBOX Autopower. Four separate probes let you analyse emissions even from multiple exhaust systems. CS9000 handles all aspects of exhaust gas analysis and fuel injection calibration in a professional manner that ensures maximum performance even in racing applications. CS9000 is equipped with a fume extraction port for connection to workshop extraction systems.



ETS

EMISSION TEST SOFTWARE

ETS, PC Software for Emission Testing

ETS is TEXA's latest software for management of emission measurements as part of mandatory vehicle testing. ETS offers a choice of 24 languages and can be configured to function according to the standards in force in the country of use.

The new "Configuration Wizard" and "Real-time Update" functions in ETS make the installation and configuration of vehicle test lines simple and intuitive.

An advanced graphic interface makes ETS software easy to use even for less experienced operators and guides testers through the correct procedure.

Depending on the legislation in force, at the end of the test, results can be printed out immediately or transmitted to the test management system in xml or proprietary format.

Configuration wizard

The new Configuration Wizard in ETS helps you install and configure vehicle test lines with confidence. The wizard makes configuring your test line extremely rapid and intuitive. TEXA's Bluetooth instrument search function lets you identify and configure all the devices connected to the system and assign them the right COM communication ports, directly from the software. This new functionality even lets you configure different rev counters for each type of test. You can therefore use a universal rev counter like RC3 for GAS and OPA measurements while using RCM to perform vehicle emission tests.

Real-time update

The innovative "Real-time update" function in ETS verifies the availability of updates on the TEXA server, downloads them and asks permission to install them. At the end of the download, you can choose whether to install the update immediately, without losing your system configuration and settings, or install it later. Updates are installed rapidly and securely and guarantee operation in conformity to the latest legal requirements as well as providing all the latest functions as soon as they are released.



TEXA Gas analyser		official test																					
FORWARD	Data Input																						
BACK	Plate	12ABC34																					
Plate	VIN	FJKGUU345689HGGHKG778																					
	Manufacturer	BMW																					
	Model	320																					
	Registration date	15.05.2015																					
	Operator	John Smith																					
	Class	COMBO vehicle or later																					
	Fuel	Gasoline																					
	Separate systems	<input type="checkbox"/>																					
	<table border="1"> <thead> <tr> <th>Limits</th> <th>Min</th> <th>Max</th> </tr> </thead> <tbody> <tr> <td>RPM at idle</td> <td>500</td> <td>1000</td> </tr> <tr> <td>CO content @ idle</td> <td>0.3</td> <td></td> </tr> <tr> <td>RPM at acc. idle</td> <td>2000</td> <td>3000</td> </tr> <tr> <td>CO content @ accelerated idle</td> <td>0.2</td> <td></td> </tr> <tr> <td>Lambda @ accelerated idle</td> <td>0.970</td> <td>1.030</td> </tr> <tr> <td>Engine temp.</td> <td>60</td> <td></td> </tr> </tbody> </table>		Limits	Min	Max	RPM at idle	500	1000	CO content @ idle	0.3		RPM at acc. idle	2000	3000	CO content @ accelerated idle	0.2		Lambda @ accelerated idle	0.970	1.030	Engine temp.	60	
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	Make the selection.																						
14 May 2015 14:51																							

TEXA Gas analyser		Continuous Measurement
FORWARD	Fast Gasoline	
BACK	Engine speed	Engine temperature
STORE	rpm	°C
Fuel selection	2500	80
Autosave	CO COEF	NO _x
	% vol.	% vol.
	0.2	0
	CO ₂	λ
	% vol.	% vol.
	14.7	1.012
	CO	O ₂
	% vol.	% vol.
	0.22	0.40
	HC	Timer
	ppm vol.	
	12	
	Press "STORE" to store or print the results or press "CLOSE" to return to the main menu.	
	Measuring...	
14 May 2015 15:58		

To check out the extensive coverage of TEXA products, go to:

www.texa.com/coverage

To check on IDC4E compatibility and minimum system requirements, go to:

www.texa.com/system



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www.youtube.com/texacom

**COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
= ISO 9001 =**



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