

EMISSION STATION NEW GENERATION

AT 408



ATAL®

EMISSION STATION ATAL® GAS SOLO



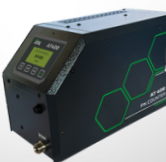
**GAS ANALYSER
AT 508**



**OPACIMETER
AT 608**



**PN COUNTER
AT 408**



**RT MODULE 3
AT 113 3045**



**DIAGNOSTICS
DIAG4 CAR-OBD
AT532 5082**



**BLUENET
MASTER DONGLE
AT 130 4006**



The compact design of the station in a single mobile stand is primarily intended for emission testing stations for passenger cars and tractors.

The package includes new measuring modules for the Analyzer (AT508) and Smoke Meter (AT608) equipped with ATAL measuring optics and key innovations that are protected by several patent applications and significantly increase the reliability of these devices and the comfort of their use.

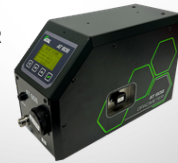
EMISSION STATION ATAL[®] GAS DUO



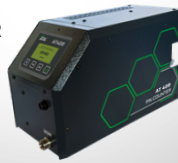
**GAS ANALYSER
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**BLUENET
MASTER DONGLE
AT 130 4006**



**BLUENET
SLAVE DONGLE
AT 130 4008**



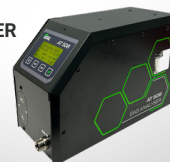
The design of the station in two separate mobile stands is primarily intended for stationary emission stations for trucks, buses, and tractors. The Analyser and Smoke Meter modules are permanently located in the stands at all emission stations, without the need to transport the smoke meter module in particular.



EMISSION STATION ATAL[®] GAS FLEX



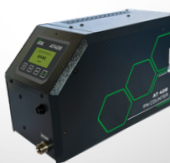
**GAS ANALYSER
AT 508**



**OPACIMETER
AT 608**



**PN COUNTER
AT 408**



**RT MODULE 3
AT 113 3045**



**DIAGNOSTICS
DIAG4 CAR-OB2
AT532 5082**



**BLUNET
MASTER DONGLE
AT 130 4006**



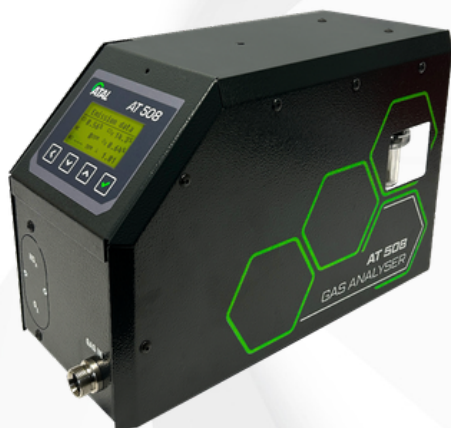
**BLUNET
SLAVE DONGLE
AT 130 4008**



The highly compact design of the station in a single mobile stand, which is controlled by a portable PC tablet, is primarily intended for mobile emission stations for all vehicles. The tablet is powered by a docking station, which also serves as a stand. The station has two USB A ports and a LAN port. The tablet comes with an AC/DC power cable.



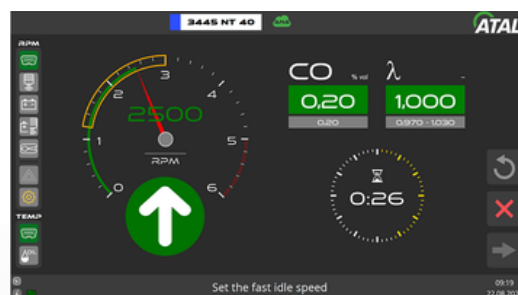
GAS ANALYSER MODULE AT 508



- ✓ Uses the ATAL NDIR optical bench using the most robust and advanced components of infrared optical technology
- ✓ The ATAL NDIR bench has an accuracy class of 00 (highest defined OIML accuracy class)
- ✓ AT508 has a built-in automatic condensate separator
- ✓ All-important internal components are protected against contact with contaminated condensate
- ✓ Condensate is strictly drained outside the instrument during the cleaning procedure of the condensate storage tank and the sampling probe

Analysér is a four (five) component exhaust gas analyser that works in conjunction with a PC. ATAL's NDIR optical bench is used for the construction of the gas analyser, which uses the NDIR method to measure CO, CO₂ and HC concentrations and electrochemical cells to measure O₂ and NO_x concentrations.

The design also exhibits high electromagnetic resistance and resistance to external mechanical and climatic influences. The described new design of the AT508 significantly increases the reliability and long-term stability of the device and considerably extends maintenance periods. The new ATAL emission instrument designs are protected by several patent applications.



The AT508 analyser module complies with OIML R 99/Class 00 and is MID certified (2014/32/EU)

• Supply voltage	230 V AC / 24 V DC	• Dimensions	380 x 250 x 150 mm
• Power input	60 W	• Operating temperature	0 to 50 °C
• Warm-up time	10 min max. (at 25°C)	• Operating relative humidity	up to 90 % non-precipitation
• Communication interface	USB (BlueNET optional)	• Atmospheric pressure	860 to 1060 hPa
• Weight	7 kg	• Storage temperature	-10 to 60 °C
• Probe length	7 m	• PC request	OS Win 10, 11

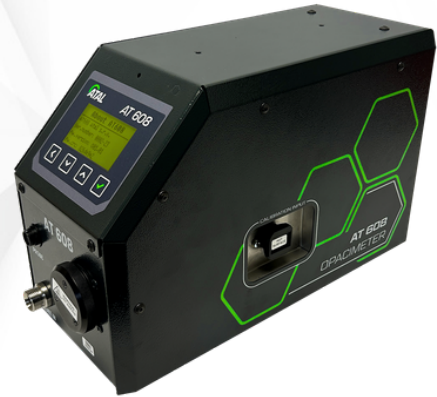
Specifications

MEASURED PARAMETER	RANGE	RESOLUTION	MEASURED ERROR
CO	0 - 10 % vol	0.01 % vol	0.02 % vol o 5% RV
CO ₂	0 - 20 % vol	0.1 % vol	0.3 % vol o 5% RV
HC _(hex)	0 - 10000 ppm vol	1 ppm vol	4 ppm vol o 5% RV
O ₂	0 - 4 % vol	0.01 % vol	0.1 % vol o 5% RV
	4 - 25 % vol	0.1 % vol	5 % RV
CO _{cor}	0 - 10 % vol	0.01 % vol	
NO _x	0 - 5000 ppm vol	1 ppm vol	
LAMBDA	0.500 - 2.000	0.001	ISO 3930 OIML R 99



OPACIMETER MODULE AT 608

- ✓ ATAL unique optical bench with a high power light source
- ✓ Uses forced extraction of the measured smoke sample by a built-in pump
- ✓ Unique smoke flow system in the measuring chamber eliminates contamination of the measuring optics
- ✓ AT608 uses a very lightweight 6 m long heated sampling probe
- ✓ 6 m long sampling probe is universal for cars and trucks
- ✓ AT608 has a built in probe cleaning procedure before starting to measure each vehicle

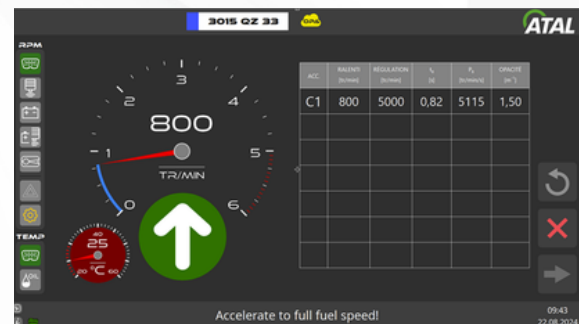


Opacimeter uses a internal pneumatic arrangement with forced smoke sampling from the vehicle exhaust. This unique approach allows the use of a very lightweight heated sampling probe with a small diameter and length comparable to a gas analyser (typically 6 m). This arrangement provides additional advantageous features such as automatic periodic probe clearance checking and probe cleaning prior to each vehicle measurement.

The AT608 measuring optical chamber uses a unique smoke sample flow system that minimizes contamination of the measuring chamber optical system, especially by condensations present in the exhaust gas.

- Module power supply 230 V AC / 24 V DC
- Power consumption 250 W of the sampling unit
- Measuring cuvette temperature 73 °C
- Effective length of the cuvette 200 mm
- Warm-up time 10 min (at 25 °C)
- Sampling probe (heated) length 6 m
inlet diameter 10 mm
outer diameter 20 mm
heated to 50 °C
- Operating temperature 0 to 50 °C
- Operating humidity 0 to 90 %
- Storage temperature -10 to 60 °C
- Weight 7 kg
- Communication interface USB (BlueNET optional)
- PC request OS Win 10, 11

The described new design of the AT608 significantly increases the reliability and long-term stability of the instrument and significantly extends maintenance periods. New ATAL emission device designs are protected by several patent.



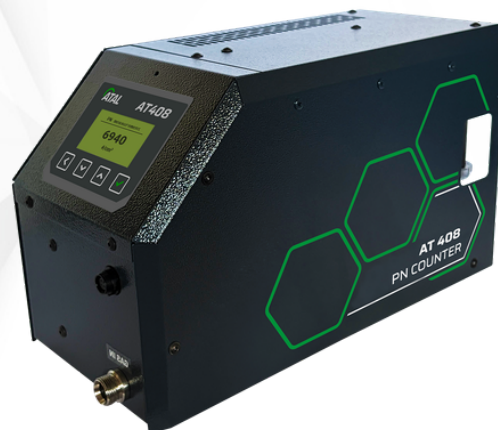
MEASURED PARAMETER	RANGE	RESOLUTION	MEASURED ERROR
Absorption	0 - ∞ m ⁻¹	0.01 min ⁻¹	± 0.15 m ⁻¹ (in the range of 0.0 to 2.5 m ⁻¹)
Coefficien (k)	0 - 100 %	0.1 % vol	± 0.3 m ⁻¹ (in the range of 2.5 to 4.0 m ⁻¹)
Opacity (N)			± 2 % Absolute

PN COUNTER MODULE AT 408

NEW



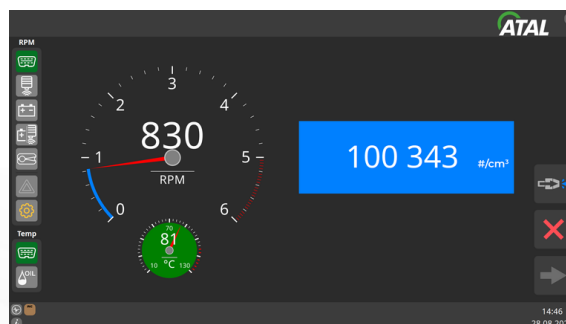
- ✓ Nanoparticle measurement utilising Extended Diffusion Charging technology (Ext. DC technology)
- ✓ The equipment does not use any flammable operating fluid for operation.
- ✓ The equipment does not use an exhaust sample dilution system.
- ✓ An automatic condensate trap protects internal components during the measurement cycle. All condensate is automatically evacuated out of the device during the sampling probe cleaning cycle.



ATAL is developing a PN particle counted (model AT408) for use in the testing of the internal combustion engine exhausts gases as part of its new range of third generation emission testing instruments. The equipment is scheduled for launch in 2026.

The AT 408 module utilises the Extended Diffusion Charging Technology measurement principles and the operating software runs on an attached PC.

The equipment has been designed to minimise interference from electromagnetic, mechanical and external atmospheric conditions. In developing the equipment with these characteristics, the reliability and long-term stability of the readings are maintained, and this contributes to a highly durable device with extended maintenance intervals.



The new ATAL emission device designs are protected by patent applications.

Preliminary parameters

Power supply	230 V AC / 24 V DC
Power consumption	200 W
Weight	9,8 kg
Dimensions	386 x 227 x 177 mm
Sampling probe (heated)	length 6 m
Operating temperature range	5°C to 40°C
Temperature range storage	10°C to 50°C
Ambient humidity	<95% (non-condensing)
Ambient pressure	860 hPa to 1060 hPa
Resolution	1000 #/cm ³
Measuring range	5000 - 5.000.000 cm ³
Warm-up time	5 min max. (at 25°C)
Communication	USB (BlueNET optional)

FIXATION SPLINT HEATED PROBE



Fixation splint

(AT1046027)

Length

2200 mm

Weight

2 kg

For heated probe

6 m

Optional for

AT 408 and AT 608



ATAL WIRELESS NETWORK BLUENET



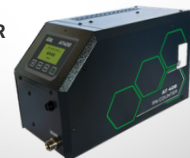
OPACIMETER
AT 608



GAS ANALYSER
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PN COUNTER
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DIAGNOSTICS
DIAG4 CAR-OB
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BLUENET
MASTER DONGLE
AT 130 4006



Communication protocols supported:

ISO 9141-2
SAE J1850 (PWM, VPW)
ISO 14230
ISO 15765
SAE J1939
ISO / PAS 27145 (VWH-OB)
Communication with cars,
trucks (2007) and tractors

PARAMETER DESCRIPTION

Working distance Up to 200m – free space
Bluetooth version 2.1
PC Connection USB 2.0
Maximum transfer rate 115200 Bd
Response time Max 100 ms
7 connected ATAL devices for Master Dongle
Consumption Max 200 mA
Supported operating systems Windows 10, 11

- ✓ For safety wireless connection of ATAL emission and garage devices to control PC
- ✓ Wireless modules with long distance (up to 200 m - free place)
- ✓ Actual technology is BT
- ✓ Network is designed for specific devices to be protected against other wireless devices
- ✓ Easy and intuitive installation and configuration



RT 3 MODULE



- ✓ RT Module 3 (BT) allows you to measure engine speed by analyzing the voltage in the vehicle's electrical system.
- ✓ Connecting and controlling the sensor is quick and easy. It can be connected either using a battery adapter or a cable to the cigarette lighter socket. It works in vehicles with both 12 V and 24 V voltages. 7 connected ATAL devices for Master Dongle voltages. 7 connected ATAL devices for Master Dongle

Engine speed measurement

To measure engine speed, connect the module to the vehicle's electrical system in one of the following ways: - via the cigarette lighter socket - directly to the battery terminals

Measuring oil temperature

A sensor of the appropriate length is used to measure the temperature

1. Remove the dipstick
2. Set the rubber stopper on the thermometer according to the length of the dipstick
3. Insert the thermometer into the hole left by the dipstick

RT 3BT specification

MEASURED QUANTITY	RANGE	RESOLUTION	ACCURACY
RPM	400 - 2000 min ⁻¹	10 min ⁻¹	20 min ⁻¹
	2001 - 9990 min ⁻¹		2% RV
TEMPERATURE	0 - 150°C	1°C	2°C

RV = the value read

RT Module 3 (BT)



MODUL AT 135

WIRELESS RPM MEASUREMENT

NEW

The AT135 module offers an innovative and convenient solution for measuring the rotational speed of internal combustion engines.

Thanks to advanced processing of the electromagnetic field generated by the engine (e.g., ignition or electrically controlled fuel injectors), it ensures fast and reliable measurements without the need for mechanical intervention in the vehicle's system.



Key Benefits:

- **Universal:** Suitable for all vehicles with gasoline engines or engines with electronically controlled fuel injectors (motorcycles, cars, machinery).
- **Versatile:** Ideal for emission and noise testing stations, etc. It can also be used standalone with direct RPM display.
- **100% wireless:** cable-free power supply and communication thanks to ATAL BlueNet technology.
- **Convenient:** requires no disassembly of vehicle or engine components.

Parameter	Value
Scanning principle	contactless
Speed range	0 – 9 990 min ⁻¹
Engine types	2/4 strokes
Display	LCD 64 × 128, backlit;
Communications	USB (BlueNET optional)
Power supply	USB / Li-ion
Operating temperature	–10°C to +50°C
Storage temperature	–20°C to +60°C
Humidity	10-80%, non-condensing
Dimensions	305 × 125 × 32 mm
Weight	520 g

set includes:



AT116 3003 Vibration sensor



0AZ00914 Power supply 24W/12V

AT103 3020 Oil temperature sensor G08m/6m



AT102 3034 Ignition sensor



Supply voltage

AC/DC adapter	230V / 16V
Car battery	9 to 30 V
Weight	0,5 kg max.
Dimensions	160 x 100 x 40 mm
Operating temperature range	5 to 40 °C

OPTIONAL

NEW

DIAG4PTI



- ✓ **OBD & OBFCM** diagnostic device for checking electronic vehicle systems for PTI (Periodical technical inspection of vehicles) (HU Adapter AT5325092)
- ✓ It is based on the **DIAG4PTI** program, which uses a regularly updated communication database that eliminates constantly emerging communication deviations, even in new vehicles.
- ✓ The **DIAG4PTI** communication interface is a user license holder, and the program can be installed on any number of PCs in the vehicle testing station.
- ✓ The **DIAG4PTI** communication interface uses ATAL's professional ATAL BlueNET wireless network with an operating distance of up to 200 m in open space.

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