pegasor

PEGASOR Mi3

THE TURNKEY SOLUTION FOR AUTOMOTIVE EMISSION TESTING

SETTING STANDARDS FOR AUTOMOTIVE EMISSION MONITORING

Powered by the Pegasor PPS-M – the most advanced particle monitoring sensor in the market – the Mi3 integrates all key components into one package that connects easily to your test gear. Its rugged design ensures it will endure the harshest of testing conditions.

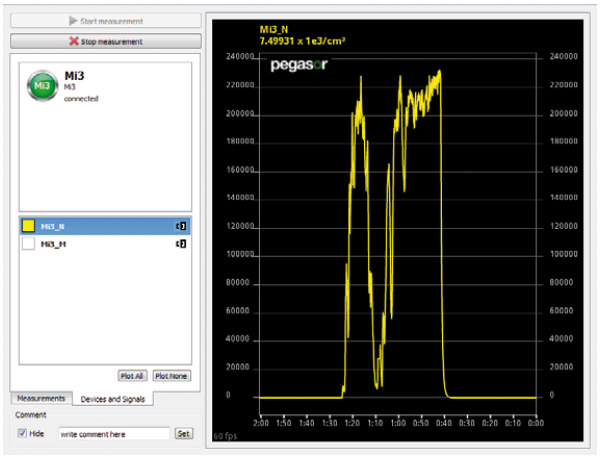
A unique turnkey solution, the Pegasor Mi3™ is the industry-leading tool for automotive emission testing. It delivers a reliable performance at engine test benches, chassis dynos, periodic technical inspection and on-board vehicles alike.

WHY MI3 IS THE TOOL OF CHOICE FOR AUTO INDUSTRY EMISSION CONTROL

- **Quick and simple to set up and use** – no complex sampling systems required
- **Accurate data in real time**, featuring the world´s fastest particle sensor
- **Reliable measurements in all environments** thanks to a wide dynamic range and high sensitivity
- **Measuring both particle number and mass** ensures your data meets the standards of emission regulations
- **Easy integration** with your existing test bench gear
- **Less downtime** – long-term continuous operation with minimal maintenance

KEEPING PERFORMANCE HIGH AND MAINTENANCE LOW

At the heart of the Mi3 lies the **Pegasor PPS-M**, the fastest sensor in the market. Unlike conventional measurement methods based on collecting particles, the PPS-M measures the electrical charge carried by particles. This allows highly accurate real-time monitoring with very low maintenance. Sophisticated self-diagnostics will ensure good data quality at all times.



SET UP YOUR SYSTEM WITH EASY-TO-USE SOFTWARE

The **Pegasor Plotter** is a PC software tool where you can define your preferred settings, monitor and store your Mi3 data, as well as export your data in real time for post-processing.

VERSATILE CONNECTIONS

You can use the Pegasor Mi3 independently as a turnkey monitoring system. It also integrates seamlessly with your existing emission test infrastructure and data collection systems, thanks to a wide range of I/O options.

- USB for Pegasor Plotter Software (PC)
- 6 channel 3-30V digital inputs
- 4-channel analog output (4-20mA / 0-10V), 2 status relay outputs
- AK protocol over Ethernet
- CAN bus (D9 connector)

Power: DC24V / AC100-240V

Sample inlet & outlet protected with automatic valves

Air: Flush air / dilution air to sample line

TECHNICAL SPECIFICA-TIONS

Minimum detectable particle size
Software adjustable down to 10 nm

Time response
0.2 s

Particle concentration range
PARTICLE NUMBER:
300 1/cm³ up to 1.3 * 10⁹ 1/cm³
PARTICLE MASS:
1 µg/m³ – 290 mg/m³

Operational overpressure
Up to 100 000 Pa

Internal dilution
Functions included

Sample temperature
Direct raw exhaust sampling with heated line

Ambient temperature
-20°C – +50°C

Data acquisition
100 Hz sample rate, SNR 100 dB

Air/nitrogen supply
Dry and particle free, pressurized @ 0.3 – 1 MPa (gauge pressure)

Air/nitrogen consumption
~ 20 lpm (Normal mode)
~ 10 lpm (Mobile mode with Air Supply unit)

Power
AC 100 – 240V 50-60 Hz or DC 24V max 20A
500W at start up (200W steady state)

Dimensions
(L x W x H): 720 x 495 x 240 mm
WEIGHT: ~37kg

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