

EOBD RPM

Digital EOBD engine speed sensor



The TEN EOBD RPM is a digital EOBD engine speed sensor which can be used on all existing TEN multigas analysers and smokemeters. The EOBD RPM is connected on the EOBD connector of the examined vehicle and through a connection cable mounted on the multigas analyser/smokemeter.

EOBD is an abbreviation which stands for European On Board Diagnosis. This means that through defined communication protocols the vehicle is able to send vehicle related information to external equipment like motortesters, fault code readers or gasanalysers.

The EOBD RPM supports the next communication protocols:

- ISO 15765-4 (CAN)
- ISO 14230-4 (Keyword Protocol 2000)
- ISO 9141-2
- SAE J1850 PWM
- SAE J1850 VPW

Important!

Not every vehicle which is built after the year 2000 supports EOBD. It can be that the vehicle is provided with an EOBD connection, but communication is not possible. This applies for petrol as well as diesel vehicles.

Also there are vehicles which communicate though different communication protocols, so not the above mentioned EOBD protocols.

Usage of the EOBD RPM.



1. EOBD stekker
2. LED indicatie
3. Aansluiting verbindingkabel

Take care that the connection cable is mounted on connection 3 of the EOBD RPM and the piëzo speed sensor entrance of your gas analyser/smokemeter. Switch down the ignition key of the vehicle and connect the EOBD plug on the EOBD connection of the vehicle. The location of the EOBD connector can be found in the technical vehicle documentation.

Switch on the ignition key and start the engine. If the EOBD RPM is powered up, three short sound signals will be heard. If the EOBD RPM is able to communicate with the vehicle, the red led (communication) lights up. This can take a while because different protocols are tried to communicate with the vehicle.

Once more you are hearing a short sound signal:

- 1 time = CAN protocol
- 2 time = Keyword 2000
- 3 time = ISO 9141-2
- 4 time = PWM
- 5 time = VPW

There are several tries to find a communication protocol, if nevertheless the communication cannot be accomplished, or the vehicle does not support EOBD. Than the led's will light up in the following sequence, first red, second green, and a short sound signal will be heard. The led's will turn off and the sequence is repeated.

As soon as the EOBD RPM is able to read out the RPM signal of the vehicle and pass it on to the gas analyser/smokemeter, the green led (RPM) blinks proportional to the number of revolutions of the vehicle.

After usage of the EOBD RPM, switch of the ignition key of the vehicle and disconnect the EOBD plug from the vehicle.