

Labcell introduces new NH₃ analysers for automotive engine development and test applications

Labcell is introducing the compact ECM 5250 NH₃ (ammonia) analyser for use in automotive dynamometers and in-vehicle development and test of diesel and lean-burn engine SCR (selective catalytic reduction) systems. A large, clear display shows measured values, and the back of the instrument features CAN, USB and RS232 ports, plus six analogue outputs. At the same time, Labcell is launching the environmentally-sealed NH₃CAN module for in-vehicle applications where the requirement is simply for a CAN output. These instruments can play a crucial role in projects to improve engine efficiency and/or emissions.



Both instruments utilise a solid-state ceramic sensor that is mounted in the exhaust, controlled by either the 5250 analyser or NH₃CAN module. These can be connected to a dynamometer data acquisition and control system or, for invehicle applications, many operators will use the CAN signal output directly with an existing software platform, data acquisition system and/or laptop computer. Indeed, the CAN output enables the instruments to be used in the loop of a real-time emissions control strategy where urea is being injected to control ammonia levels. While the 5250 analyser can operate in either single-channel or dual-channel mode, the NH₃CAN module is a single-channel device.

Because the sensor in fitted in the exhaust, there is no need for sample lines or pumps, which makes installation very straightforward. Furthermore, the sensor can be located up to 100m from the analyser with no loss of response time (less than one second) or accuracy (+/-5ppm). Calibration (zero and span) can be carried out by the user, with the calibration data stored on a memory chip on the sensor's connector. If required, a pressure compensation kit can be added to improve accuracy when operating under pressure.

Labcell is the sole UK distributor for ECM and has demonstration units available for customers interested in the new ECM 5250 and NH₃CAN analysers. For more information about these and other instruments for engine development and test applications, please visit our website on the link below.

We would like the opportunity to help you assess the potential benefits of using the ECM 5250 and welcome the chance to discuss it further. Please do email your application or questions to mail@labcell.com