ECM **NH_3CAN**

NH_3 CAN Module

For Diesel and Lean-Burn Engines

- 0 to 2000 ppm NH_3 Range
- For Lean Lambda Applications ($\lambda > 1$)
- CAN Communication
- Environmentally Sealed
- Can be Recalibrated (Zero, Span)
- Sensor with Memory Chip
- Optional Pressure Compensation
- Optional Display Heads

ECM's NH_3CAN Module is a CAN output device for the measurement of NH_3 in the exhaust of diesel and other lean-burn engines. This makes the module useful for SCR system development or to compensate exhaust NOx sensors for NH_3 cross-sensitivity. NH_3CAN uses a ceramic sensor that is mounted in the exhaust of the engine and communicates NH_3 information via its CAN port.

Although designed primarily as a measurement tool, the NH_3CAN can be easily integrated into an engine or aftertreatment control strategy. The CAN node identification can be programmed by the user allowing multiple NH_3 modules on the same bus. NH_3 sensors used with the module have memory chips in their connector where calibration information is stored. This allows sensors to be recalibrated (zero, span) in a central location and distributed to users, ensuring consistent results throughout a large test facility. PC software to set-up, control, calibrate, and view outputs and sensor parameters is included (requires CAN adapter). For improved accuracy under pressure, a pressure compensation kit is available. Three optional displays, two with programmable analog outputs, are available. These displays can be used with one or two modules.

Specifications

Inputs	1 Ceramic NH_3 Sensor, 1 Pressure Sensor (optional)
Ranges	**NH_3** 0 to 2000 ppm (for $\lambda > 1$) **Pressure** 0 to 517 KPa (0 to 75 psia)
Accuracies	**NH_3** ± 5 ppm (0 to 200 ppm) **Pressure** ± 5.2 KPa (± 0.75 psia)
Response Time	Less than 1 s
NH_3 Sensor Thread	18mm x 1.5mm
Sensor Cable	+1m (standard), +2m (optional)
CAN	High Speed according to ISO 11898
Configuration	Via CAN Bus with Configuration Software. Programmable Node ID.
Module	145mm x 120mm x 40mm, Environmentally Sealed
Environmental	Electronics: -55 to +125°C, IP67 Sensor: 450°C (maximum gas temperature for use) 700°C (maximum gas temperature without possibility of sensor damage)
Power	11 to 28 VDC, AC/DC (optional)

Ordering Information

NH3CAN NH3CAN Kit (module, harness, sensor)

/P	Optional Pressure Compensation Kit
06-07	Spare NH_3 sensor
10-02	1m NH_3 sensor extension cable
10-03	2m NH_3 sensor extension cable
01-05	Optional One/Two-Channel Programmable Display Head with six Analog Outputs (dashCAN+)
01-08	Optional One/Two-Channel Programmable Compact Display Head with two Analog Outputs (dashCAN2)
01-04	Optional One/Two-Channel Programmable Compact Display Head (dashCAN)
12-01	Optional Rackmount Panel for up to four Display Heads (3.5", 89mm)
04-01	Optional AC/DC Supply supporting two Modules and one Display Head
13-02	CAN Adapter (required to use supplied PC Configuration Software)

ECM ENGINE CONTROL AND MONITORING
Los Altos • CA • 94023-0040 • USA • Tel: (408) 734-3433 • Fax: (408) 734-3432 • www.ecm-co.com