

LABCELL LTD ENGINE TEST INSTRUMENTATION

ECM NOxCANg (Type G) NO_X $/\lambda$ /O₂ CAN Module

Recommended for Diesel Engines



- 0 to 5000 ppm NOx range
- 0.4 to 25 Lambda range
- 0 to 25% O2 range
- CAN Communication

- Can be Recalibrated (Zero, Span)
- Sensor with Memory Chip
- Optional Pressure Compensation
- Optional Display Heads
- Environmentally Sealed

The ECM NOxCAN, Type G Module (NOxCANg) is a versatile and highly integratable NO_X, Lambda, and O₂ measurement device. The NOxCANg uses a ceramic sensor that is mounted in the exhaust of the engine and communicates measured NO_X, Lambda, O₂, and all sensor parameters via its CAN port. Although designed as a measurement tool, the NOxCANg can be easily integrated into an engine or aftertreatment control strategy. The CAN node identification can be programmed by the user allowing multiple NO_X modules on the same bus. Fuel H:C, O:C, and N:C ratios can be programmed. NO_X sensors used with the module have memory chips in their connector where calibration information is stored. This allows the sensors to be recalibrated (zero, span) in a central location and distributed to users, ensuring consistant results throughout a large test facility. PC software to set-up, control, calibrate, and view outputs and sensor parameters is included (requires CAN adapter, available). For improved accuracy under pressure, a pressure compensation kit is available. Two optional displays, one with programmable analog outputs, are available. These displays can be used with one or two modules.

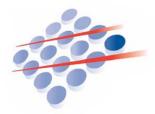
Specifications

Inputs	1 Ceramic NOx Sensor (Type G)
Ranges	$NO_{X}~0$ to 5000 ppm (for lean only), λ (Lambda) 0.40 to 25, AFR 6.0 to 364, $\%O_{2}~0$ to 25
Accuracies	NO_X ± 15 ppm (0 to 1000 ppm), ± 1.5% (elsewhere) $\lambda \pm 0.008$ (at 1 λ), ± 0.016 (at 0.8 to 1.2 λ), ± 0.018 (elsewhere) AFR ± 0.15 (at 14.6 AFR), ± 0.4 (at 12 to 18 AFR), ± 1.0 (elsewhere) % O ₂ ± 0.4 (0 to 2% O ₂), ± 0.8 (elsewhere)
Response Time	Less than 1 s (NO _X). Less than 150 ms (λ , AFR, φ , O ₂)
Fuel Type	Programmable H:C, O:C, N:C ratios, and H_2
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	-55 to +125°C, IP67 module, 950°C (maximum continuous) NOx sensor
Sensor Cable	+1m (standard), +2m (optional)
Power	11 to 28 VDC, AC/DC (optional)
Sensor Mounting	20mm x 1.5mm

Ordering Information

NOxCANg NOxCANg Kit (module, harness, sensor)

- Note: Any NOxCANg module can be used with any Type G NO_X sensor (P/N 06-02). All modules are identical. NOxCANg modules and sensors are not interchangeable with NOxCAN or NOxCANt modules and sensors. The NOx sensor's memory chip will tell the module the sensor calibration information.
- /P Optional Pressure Compensation Kit
- 06-02 Spare NOx sensor (Type G)
- **10-02** 1m NO_{X} sensor extension cable
- **10-03** 2m NO_X sensor extension cable
- 01-05 Optional One/Two-Channel Programmable Display Head with Analog Outputs (dashCAN+)
- 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)





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