

LABCELL LTD

ENGINE TEST INSTRUMENTATION

ECM NO_xCAN_t (Type T) NO_x/λ/O₂ CAN Module *Recommended for Spark Ignition Engines*



- For All Stoichiometries (Rich and Lean)
- 0 to 5000 ppm NO_x 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 NO_xCAN, Type T Module (NO_xCAN_t) is a versatile and highly integratable NO_x, Lambda, and O₂ measurement device. The NO_xCAN_t 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 NO_xCAN_t 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 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, 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

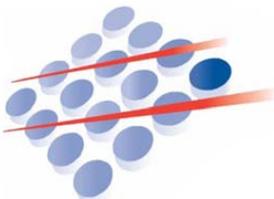
Inputs	1 Ceramic NO _x Sensor (Type T)
Ranges	NO_x 0 to 5000 ppm, λ (Lambda) 0.40 to 25, AFR 6.0 to 364, %O₂ 0 to 25
Accuracies	NO_x ± 20 ppm (0 to 1000 ppm), ± 2.0% (elsewhere) λ ± 0.008 (at 1 λ), ± 0.016 (at 0.8 to 1.2 λ), ± 0.018 (elsewhere) AFR ± 0.15 (at 14.6 AFR), ± 0.4 (at 12 to 18 AFR), ± 1.0 (elsewhere) %O₂ ± 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) NO _x sensor
Sensor Cable	+1m (standard), +2m (optional)
Power	11 to 28 VDC, AC/DC (optional)
Sensor Mounting	18mm x 1.5mm

Ordering Information

NOxCANt NOxCANt Kit (module, harness, sensor)

Note: Any NOxCANt module can be used with any Type T NO_x sensor (P/N 06-05). All modules are identical. NOxCANt modules and sensors are not interchangeable with NOxCAN or NOxCANg modules and sensors. The NO_x sensor's memory chip will tell the module the sensor calibration information.

/P	Optional Pressure Compensation Kit
06-05	Spare NO _x sensor (Type T)
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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