

PRODUCT INSTALLATION

Smart Flex Fuel Cable Nissan GT-R



The GotBoost Performance Smart Flex Fuel Cable is a true Plug'n'Play 'All-in-One' Ethanol Content Analyzer harness for the Nissan GT-R R35.

Built with direct fit high quality connectors for a quick and easy installation, the Smart Cable connects directly to a flow through flex fuel sensor for GM applications, and to the Nissan GT-R secondary air injection MAF connector. An additional harness loom provides additional optional outputs and LED ground driver.



The Smart Cable can be mounted in the vehicle's engine bay. While the unit is completely sealed, do keep away from any heat and water. The ideal mounting location for the analyzer box is in the battery compartment within reach of the vehicle grey 4 pole secondary air injection harness connector as pictured below, left.



If installing along with a vehicle flex fuel sensor, it is your responsibility to ensure that the fuel system components are installed correctly. Always check for fuel leaks. Seek professional installation if you are unsure, to avoid fire hazard. Ensure that the Smart Cable brown connector is within reach of the Ethanol Content Sensor.

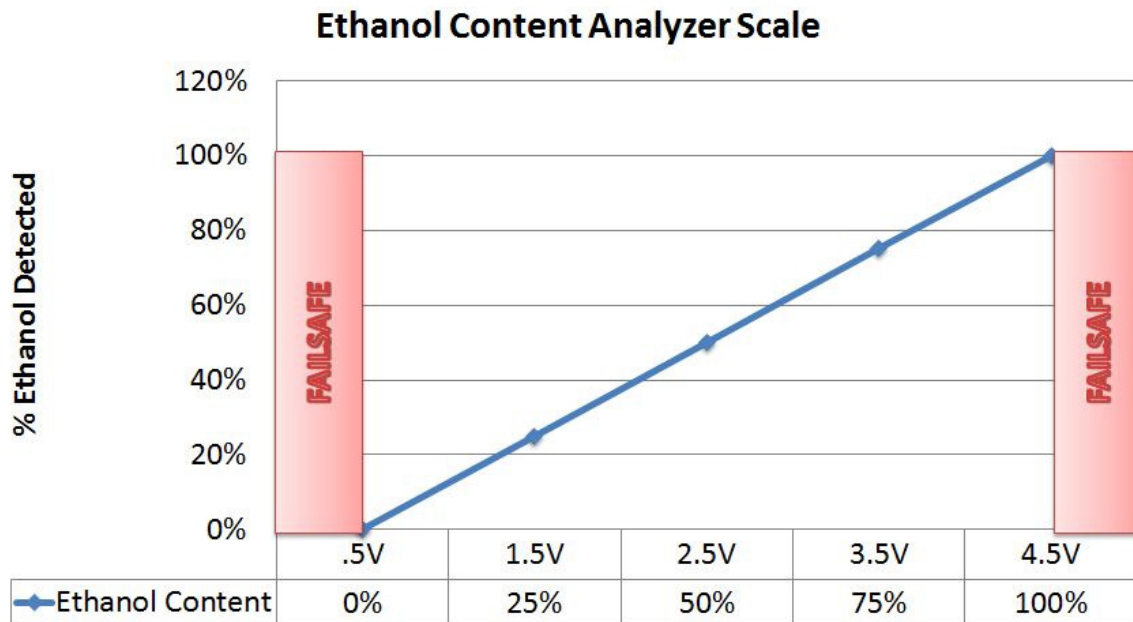
Smart Flex Fuel Cable Analyzer Specification

The Smart Flex Fuel cable is equipped with a GT-R specific harness connector to interface with the vehicle Secondary Air Injection Pump.

The vehicle MUST be equipped with an aftermarket Engine Management System supporting this feature in order to install the analyzer. Failure to do so can result in damage to the vehicle.

The Nissan GT-R specific connector outputs an analog signal with built-in failsafe range. The output voltage is proportional to the ethanol content detected by the sensor. No sensor calibration is required.

The minimal valid output is 0.5V which indicates 0% Ethanol, and the maximal valid output is 4.5V indicated 100% Ethanol. Signal readings outside of these parameters indicate a failure scenario such as disconnected sensor. Please refer to the chart below.



Warning. The Smart Flex Fuel cable is intended for aftermarket off road use only. The Smart Flex Fuel cable alone does not convert a vehicle for Flex Fuel application. An aftermarket Engine Management Software is required in conjunction with this product.

Auxiliary Connector

The GotBoost Performance Smart Flex Fuel Cable harness also includes a secondary 3 pole connector.

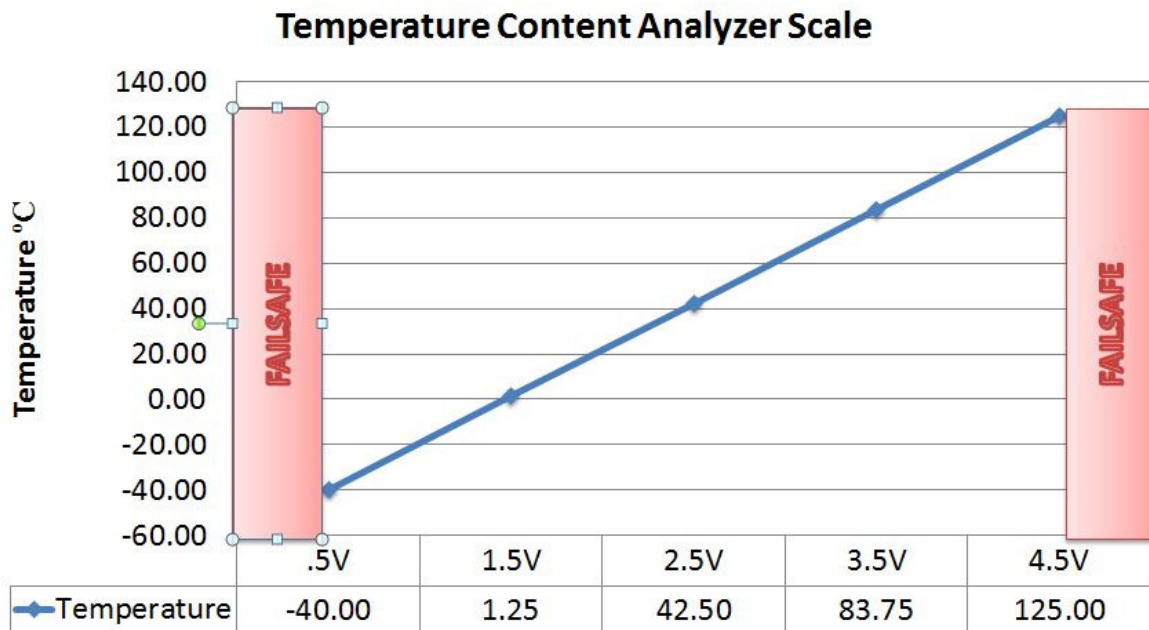
This connector 3 wire contains optional signals that can be integrated into aftermarket Engine Management Software and with the Super Bridge LED indicator included with the product.

The 3 additional signals wires on the Smart Cable side are:

- Native Sensor Pulse Width Modulation (PWM) Signal with integrated 5v pickup. (blue)
- Analog Fuel Temperature (yellow)
- Super Bright LED indicator ground driver (pink)



The Analog fuel temperature output is on a 0.5-4.5V scale.



Super Bright LED Indicator

An auxiliary harness connector with LED a mounting grommet and a positap are included with the Smart Flex Fuel Cable Analyzer.

The OEM connector uses the LED indicator ground driver signal to provide grounding for the bright 12V blue LED assembly.

The LED provides an easy to understand set of visual signals:

- **Power-ON Ethanol Content Report**

When the analyzer is first powered on, and whenever it recovers from a failsafe condition, it will flash the first valid ethanol content detected, with each flash representing 10% Ethanol content , rounded up.

A 0% Ethanol content detection will yield 1 flash

A 62% Ethanol content detection will result in 7 flashes

A 100% Ethanol content detection will result in 11 flashes

- **Fuel Temperature Warning**

Whenever the sensor reports fuel temperatures above 77C, the LED will flash repeatedly at high rate until the temperature falls back below the threshold.

- **General Malfunction**

In case the analyzer has a general malfunction, the LED will illuminate permanently. This will be combined with a failsafe voltage output on the analog Ethanol signal output as well. The vehicle will have to be powered off for the error to clear.

