



1CH ANALOG EGT MODULE 554-188A

Overview:

The 1CH Analog EGT controller is designed for use with a K-type thermocouple using a “mini-k” connector. The accurate temperature measurement range is 32-2282F (0-1250C) with an accuracy of +/- 5 degrees F. The 1ch Analog EGT Module outputs a 0-5v and can be used with systems that have configurable 5v inputs.

Specs:

Voltage range	6.5-24 volts
Operating Temperature range	-40–221F (-40-105C)
Update rate	60hz

LED

The EGT module has a Green LED that indicates basic functionality of the unit

LED Status	Description
Solid ON	Device operation normal
Flashing	No Thermocouple connected or thermocouple failed

MOUNTING

The EGT module is designed to be installed with a zip-tie or a pair of #6 or #8 screws.

WIRING:

The harness is a “flying lead” harness with three wires exposed for power, ground, and signal.

Color	Purpose
White	Power (6.5v-24.0v)
Black	Ground
Orange	Analog output

ANALOG SETUP:

The Analog output scaling is accurate between 0.5 and 4.5 volts and covers the temperature range of a type K thermocouple which is 32F (0C) to 2282F (1250C). The analog output does output a full 0-5 volt range though the last .5 volts on either end is not as accurate as the rest of the curve due to the K-type probes being beyond their normal range. The full curve is 0v = -249.25F (-156.25C) and 5V = 2563.25 (1406.25C). A reference table is provided below along with a formula to calculate the temperature from a given voltage so users can input any voltage and temp combo needed into their data recorder or EFI system.

VOLTAGE	TEMP F	TEMP C
0	-249.25	-156.25
0.5	32	0
1.0	313.25	156.25
1.5	594.5	312.5
2.0	875.75	468.75
2.5	1157	625
3.0	1438.25	781.25
3.5	1719.5	937.5
4.0	2000.75	1093.75
4.5	2282	1250
5.0	2563.25	1406.25

$$\text{TEMP F} = \text{voltage} * 562.5 - 249.25$$

$$\text{TEMP C} = \text{voltage} * 312.5 - 156.25$$