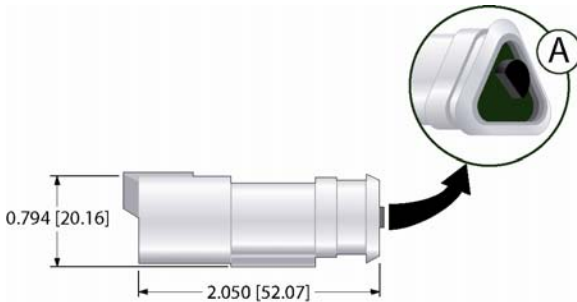# Analog Temperature Sensor
P/N 115722
One-Page Manual

OVERVIEW

The Analog Temperature Sensor is a compact, waterproof module that converts ambient temperature (-40°F [-40°C] to +257°F [+125°C]) to an analog voltage (+174mV to +1205mV) for use with various Class 1 ES-Key modules.
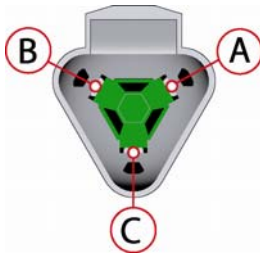
The Analog Temperature Sensor is housed in a standard Deutsch 3-pin plug and protrudes slightly from the potted end (inset A).

Dimension in inches [millimeters].

WIRING

The Analog Temperature Sensor has a single 3-pin Deutsch connector.

Mating connector:	Deutsch DT06-3S
Terminals:	Deutsch 0462-201-16141
Recommended wire gage: 14 – 18 AWG	

| PIN	DESCRIPTION		DIRECTION
A	POWER	(+2.7VDC…+10VDC)	INPUT
B	GROUND	(system ground)	INPUT
C	SIGNAL	(+174mV…+1205Mv)	OUTPUT

MOUNTING

The Analog Temperature Sensor can be secured to a surface with Deutsch mounting clip (p/n 1011-026-0205).
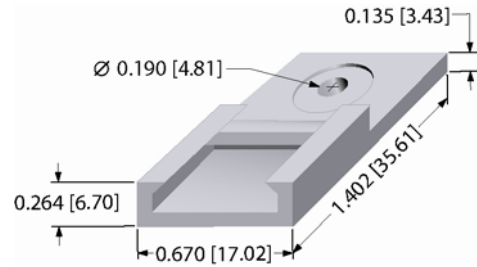
Dimension in inches [millimeters].

1. Attach the Deutsch mounting clip to the mounting surface with a #8 or #10 screw.

2. Secure the Analog Temperature Sensor by sliding into the mounting clip.
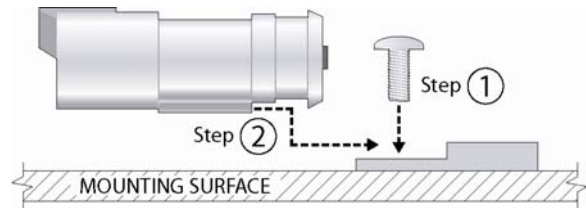
SPECIFICATIONS

Accuracy

	@ 77°F [25°C]	± 5.4°F [3.0°C] (max)
−40°F [−40°C] to +257°F [+125°C]		± 7.2°F [4.0°C] (max)
Temperature slope		+ 6.25mV/°C
Input Voltage		+2.7VDC to +10VDC
Current drain	@ 77°F [25°C]	110μA (max)
Nonlinearity		± 1.5°F [0.8°C] (max)
Output range	(signal)	+174mV to +1205mV

SIGNAL OUTPUT VOLTAGE DEFINITION

Vout = (Tslope x Tc) + Voffset

Tslope	= +6.25mV/°C
Tc	= Temperature in degrees Celsius
Voffset	= +424mV

FORM-ENG-043 REV- 12-06-06

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