

Non intrusive / Non contact Ultrasonic Fuel Sensor

last revised July 22, 2018

This fuel sensor is attached to the bottom of a fuel tank and provides non-contact measurement of fuel level in any fiberglass, plastic or metal fuel tank. The sensor puck is very small and all interface circuitry is contained within the sensor puck. It is designed to directly attach to a Radiant Fuel Gauge (digital input). The fuel level is indicated in height of fuel above the sensor; this is converted to percentage via calibration of the Radiant Fuel Gauge.

For additional compatibility, an optional small control module is available which allows 5 point calibration and converts the signal to a 0 to 5 volt standard fuel level signal.



Ultrasonic Fuel Sensor shown mounted on tank.

FEATURES & SPECIFICATIONS

- ✓ Non intrusive, non contact fuel measurement
- \checkmark Works with any metal, plastic, fiberglass fuel tank
- ✓ Small size
- ✓ Very accurate
- \checkmark Works with any type of liquid
- ✓ Designed for direct digital interface to Radiant Fuel Gauge (digital input)
- ✓ Easy Installation
- ✓ Optional five point calibration with five volt output available
- ✓ Minimal dead zone 2 inches of fuel in the tank. Dead zone varies by material and installation.
- ✓ LED on puck indicates presence or absence of detected fuel

INSTALLATION



Puck and cable dimensions

- \Box The cable length may be extended to any desired length. Use shielded cable.
- \Box Bond the ultrasonic puck to the bottom of the fuel tank using supplied adhesive.
- □ Install Radiant Fuel Gauge (digital input) [sold separately]



2.25" Main Cutout. Four 0.170" mounting holes are on 2.625" diameter circle. Inner circle is 2.25".

Standard 2.25" cutout

- □ Route to Radiant Fuel Gauge (digital input)
- □ Calibrate Radiant Fuel Gauge for empty and full
- □ Alternatively, you may install the optional five point, 0 to 5 volt controller (sold separately). Connect this ultrasonic sender to that unit; calibrate it in quarter tank increments. Connect its output to a fuel gauge of your choice.

OPERATION

- ✓ The probe continuously transmits digital fuel information to the gauge. The gauge will show current fuel. Remember, there is a 2" dead zone at the bottom of the tank.
- ✓ A blue LED shows presence or absence of detected fluid.

PURCHASE OPTIONS

- ✓ Radiant Ultrasonic Fuel Probe, RUFP-1. Attaches to a Radiant Digital Fuel Gauge (sold separately, Part RDFG-1, see below). All you need is the probe and the RDFG, and you have a complete noncontact digital fuel measurement system.
- ✓ Radiant Ultrasonic Fuel Probe Controller, RUFC-1. Attaches the Fuel Probe, provides 0 to 5 volt out.
- ✓ Radiant Digital Fuel Gauge, RDFG-1. This Radiant gauge is designed for direct digital connection to one or two ultrasonic fuel probes.

DISCLAIMER: Products from RADIANT Technology are not designed to be used in applications where their failure would endanger safe flight or human life in any way. They are intended solely for use in VFR conditions. They are not certified to meet any Technical Standard Order and are not produced under a Parts Manufacturing Authority (TSO / PMA). As a result, they are suitable only for use in experimental and ultralight aircraft, and in Light Sport Aircraft, if meeting the requirements of the respective manufacture.

WARRANTY: Your new RADIANT Technology instrument carries a one year warranty. Please contact us at <u>support@beliteaircraft.com</u> should your product need warranty service. International warranty service will be charged US\$50.00 for repairs, which includes return shipping after repair. Payment must be received before service begins.

RETURN/REFUND INFORMATION: Must be returned in new, resalable condition within 14 days.

CONTACT: <u>info@beliteaircraft.com</u>, 316-253-6746 / RADIANT Technology/Belite Enterprises LLC, 8610 E. 34th Street N. Wichita KS 67226