

## Ultrasonic Fuel Level Sensor - UFLS



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If your business infrastructure relies on backup generators, the chances are you are also relying on fuel to power those. By using the AKCP Ultrasonic Fuel Level Sensor you can ensure that your fuel tanks are filled and ready for the most critical moments.

The AKCP Ultrasonic Fuel Level Sensor is a liquid level detector that will monitor the level of liquid in a tank and display this level on the securityProbe 5E's web interface and send alerts accordingly.

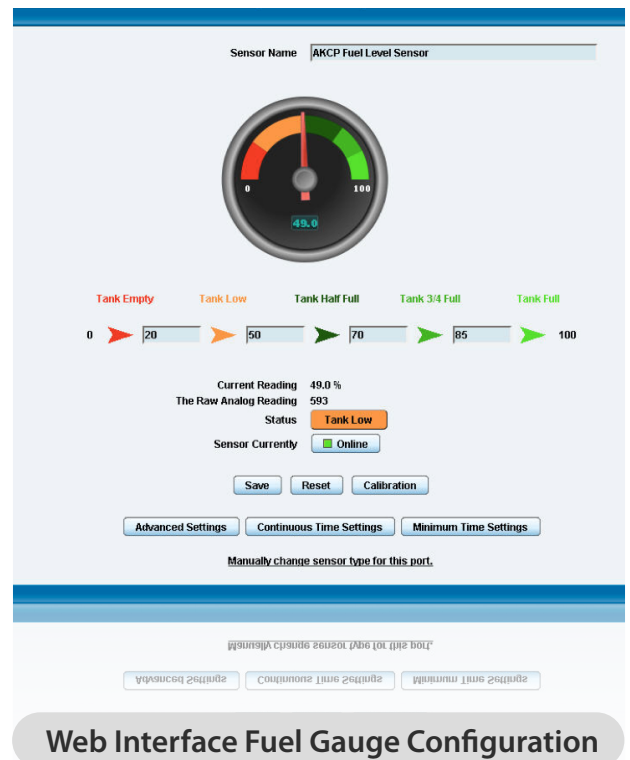
The RJ-45 intelligent sensor port on base unit powers the sensor. It is compatible with any of the securityProbe series units, or the E-sensor 8 expansion modules.

You can instantly be alerted should there be any drop below critical levels in your fuel. Advance alerting, including an additional feature that alerts you if you tank level is dropping too quickly, protects you from possible fuel leaks or theft.

The sensor assembly incorporates an advanced tank sender based on the Ultrasonic measurement technology and can monitor a variety of liquids in many types of tanks. These tank level thresholds can then be linked to the advanced notification alerts on the securityProbe 5E's web interface or the AKCess Pro Server Application.

This sensor is designed for monitoring levels of water, diesel, petrol fuel and waste tanks. These tanks can be in linear and non-linear sizes as they are easily calibrated from a simple wizard that is run from the securityProbe 5E's web interface. Linearization parameters are used to adjust the measurement accuracy for non-linear fuel tanks. For example a fuel tank is non-linear if the tank height is not proportional to its capacity.

The low profile design and standard SAE 5 hole mounting pattern make it easy to install and setup and it has no moving parts for long lasting functionality.



Web Interface Fuel Gauge Configuration

## Ultrasonic Fuel Level Sensor's Main Features

- Ideal for remote sites that depend on backup generator power
- Normal, Low and Critical alerting
- Easy setup and installation
- Can monitor several liquids, including fuel, oil and water
- Monitor your tanks for critically low levels of fuel
- Requires 12V external power supply (This is Included)
- Extremely low profile only 20mm high once mounted
- Operating distance of 0mm to 2000mm
- Programmable tank dimensions via windows application
- Linear and non linear tank calibration at 5 levels
- Supports metal and plastic tanks
- Supports tanks wall thickness up to 6mm (or larger if spacer is used and top limit adjusted)
- Industry standard SAE-5 stud mounting pattern with gasket seal and washers.

## Technical Specifications

All size tanks with depth up to 2 meters

Accurate measurement for non-linear size tank

Standard SAE 5 mounting hole and easy fit

Is set for 0-2000 mm depth off the shelf (not suitable for tank depths less than 200 mm)

**Measurement Method :** Acoustic sonic measurement

**Tank Depth :** 0–2000 mm (6.5 ft)

**Accuracy Distance :** 0–2000 mm (6.5 ft) at 2 mm accuracy

**Mounting :** SAE 5 stud mounting pattern with gasket, seal and screws (top mount only).

**Tank Type Style :** Metal and plastic with non linear capacity

Works with petrol, diesel, fresh water, grey water and black water

Requires securityProbe 5E or E-Sensor8 expansion module

**Communications Cable :** RJ-45 jack to base unit using UTP CAT5 cable.

**Communications Cable Max. length:** 100ft (30 meters)

Comes fully assembled, only needs calibration and installation.

Leader cable from the tank sender to the converter box is 18 inches

Ships with a 15 foot CAT6 LAN extension cable

CAT6 LAN extension cable can be extended up to 100 feet.

## Environmental

**Chemical Resistance :** Petrol, diesel, water, toilet chemicals

**Operating Temperature Range :** 4°C to 65°C

## Electrical

Operates from a 12 volt external power supply (included)

**Current Draw :** 25 mA with 5 V gauge output

**Ignition Protected :** ISO 8846

**Fire Resistance :** Tested to ABYC, US Coast guard and ISO10088

**Output types:** Analogue 10-180, 10-300, 240-33 ohm gauges and 0-5volt

## Maximum Tank depths

Operating distance of 0mm to 1100mm for Petrol tanks

Operating distance of 0mm to 2000mm for Water tanks

Operating distance of 0mm to 2000mm for Diesel tanks

Operating distance of 0mm to 1500mm at 55°C

## Technical Drawings

