

## Monitor Fuel Level, Track Usage and Detect Theft

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.

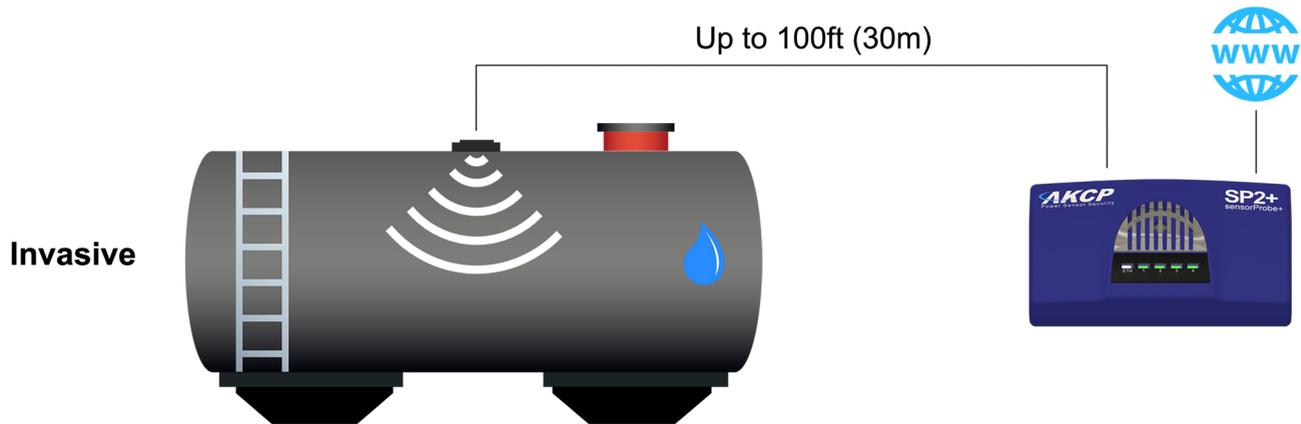
The AKCP Ultrasonic Fuel Level Sensor is a liquid level detector that will monitor the tank and display the data on the base unit web interface. For multiple sites display data from all your tanks in a single user interface with AKCP Pro Server.

Combine the sensor with one of the AKCP Modbus compatible base units to monitor your generator parameters for a complete generator and fuel monitoring solution



**Invasive Ultrasonic Tank Sensor. Requires cutting of holes in the top of the tank for mounting**

**Connect to the AKCP base unit from the UFLS control box. Use CAT5 cable to extend the sensor up to 50ft from the base unit**



Ultrasonic Tank Level Sensor connected to SP2+ monitoring device. The SP2+ monitoring device communicates the collected sensor data via the internet. Login to the SP2+ embedded web interface to view sensor data, or send to AKCess Pro Server central monitoring platform.

## Advantages of AKCP Fuel Monitoring System

- Monitor your fuel tanks and know when to re-fuel
- Check for fuel theft, or unusual rates of level drop
- Track fuel usage over time with full reporting
- Communicate via the internet or Cellular Data Network
- Centralized monitoring of multiple sites through AKCess Pro Server
- Integration with generators for complete monitoring solution

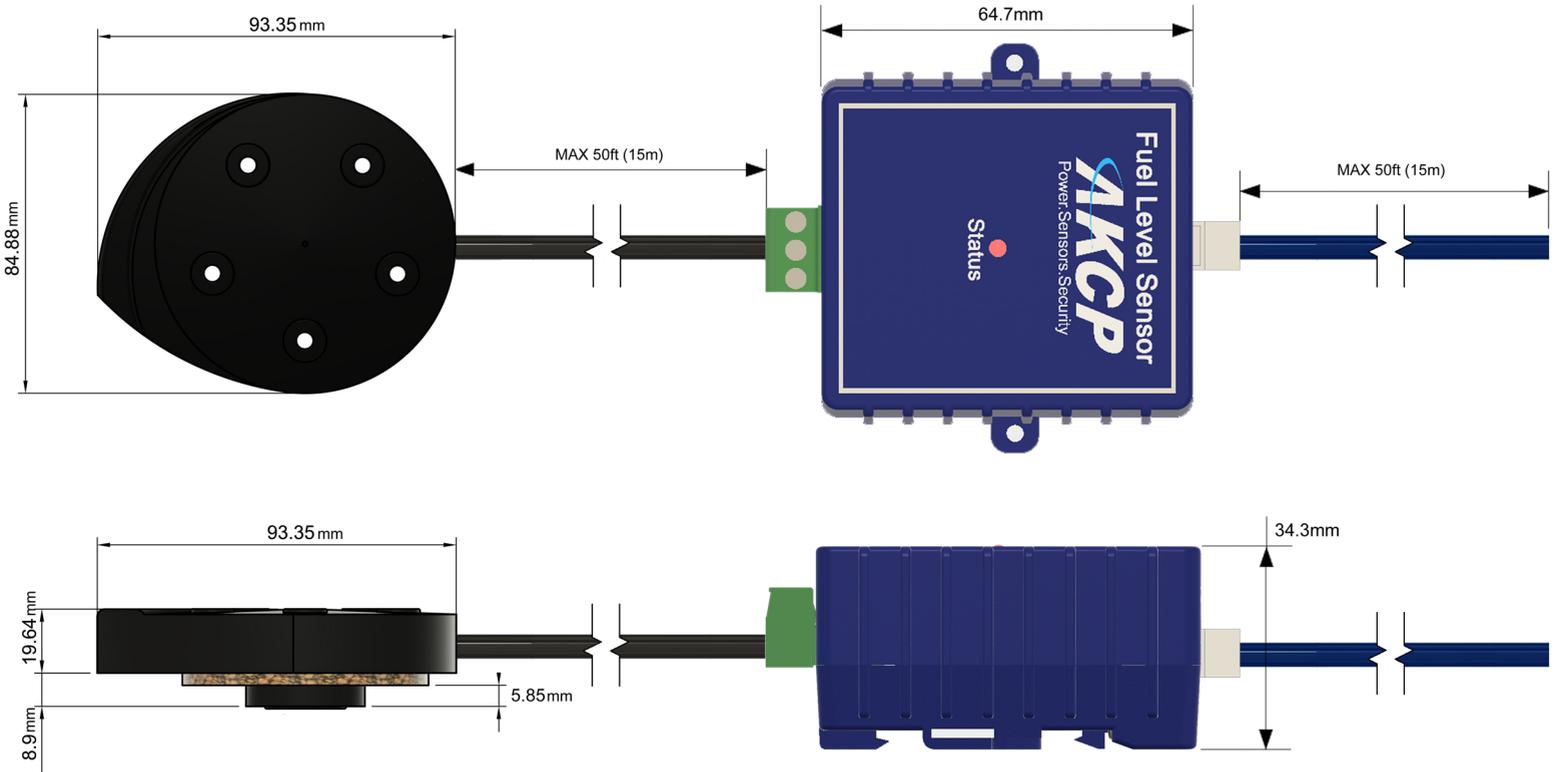
### Fuel Theft and Losses

Detect fuel theft/losses over a period of a month by monitor the total fuel used by the generator against the actual fuel drop in the tank.

Typical instances of fuel theft are a small amount daily, such as 10 litres. But this can add up over a month to 300+ litres of losses.

With a Modbus connection to the generator you can record the fuel flow rate consumed by the generator over a month. This value can be compared to the actual change in fuel level. When there is a large discrepancy between these two numbers it can be a sign of fuel theft associated with that tank.

**Technical Drawing**  
Dimensions in mm



## Technical Specifications

<b>Tank Depth</b>	All size tanks with liquid depth up to 2 meters
<b>Liquid types</b>	Works with fuels (Diesel, Kerosene etc), fresh water, grey water and black water
<b>Base unit compatability</b>	Requires securityProbe 5E, E-Sensor8 EXP or sensorProbe+
<b>Communications Cable</b>	RJ45 jack to tank sender using UTP Cat 5 wire
<b>Communications Cable Max. length:</b>	50ft (15 meters)
<b>Assembly and Calibration</b>	Comes fully assembled, only needs calibration and installation
<b>Supplied leader cable</b>	Leader cable from tank sender to sensor box is 18 inches. Can be extended up to 50ft (15m)
<b>Ships with a 15 foot CAT5 LAN extension cable</b>	Ships with 15ft CAT5 sensor cable, can be extended up to 50ft (15m)
<b>Manufacturers Warning</b>	It is advised that the UFLS is not to be used with explosive chemicals of any kind.
<b>Mounting Pattern</b>	Standard SAE 5 mounting hole for easy fit.
<b>Minium Tank Depth</b>	Not suitable for tank liquid depths less than 200mm
<b>Measurement Method</b>	Acoustic sonic measurement
<b>Tank Depth</b>	0–2000 mm (6.5 ft)
<b>Accuracy Distance</b>	0–2000 mm (6.5 ft) at 2 mm accuracy
<b>Full Scale Accuracy</b>	+/- 2%-5% Full-Scale Accuracy
<b>Mounting</b>	SAE 5 stud mounting pattern with gasket, seal and screws (top mount only)
<b>Tank Type Style</b>	Metal and plastic with non linear capacity, with thickness less than 8mm
<b>Operating Temperature</b>	4°C to 65°C
<b>Electrical</b>	
<b>Power Supply</b>	Operates from 12 VDC External Power Suppler (included)
<b>Current Draw</b>	25 mA with 5 V gauge output
<b>Ignition Protected</b>	ISO 8846
<b>Fire Resistance</b>	Tested to ABYC, US Coast guard and ISO10088
<b>Output types:</b>	Analogue 10-180, 10-300, 240-33 ohm gauges and 0-5volt

## About AKCP

AKCP established in the USA in 1981, created the market for networked temperature, environmental and power monitoring solutions. Today with over 100 employees and 130,000 installations, AKCP is the world's oldest and largest manufacturer of SNMP enabled networked sensors for the data center.