

TEK 750 WiFi Ultrasonic

Our Wi-Fi Tank Sensor is a flexible and configurable battery-operated liquid level sensor with an integrated Wi-Fi modem.

Applications

- Liquid level monitoring
- Fuel – Oil, Kerosene, Diesel
- Lubricants
- Additives
- DEF / AdBlue
- Coolants
- Water
- Waste Oil
- Wastewater
- Chemicals - **This product may not be suitable for monitoring certain corrosive and hazardous chemicals. List of product compatible chemicals to be verified with Tekelek representative.*



Benefits

- Accurate, reliable tank level monitoring
- Wi-Fi Communication
- Spot and continuous inventory management
- Ensure continued supply
- Programmable reporting interval
- Remote configurability
- Easy to install
- CE Conformance and ROHS Compliant
- Increase efficiency
- Improve profitability
- Optimise logistics
- 24/7 monitoring



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Since the suitability of these products depends upon a wide range of factors not in our control, Rochester Sensors expects and understands that you will conduct the testing and evaluation necessary to determine that these products are suitable for your application. Whilst every effort is made to ensure the above details are correct at the time of printing, Rochester Sensors reserves the right to make material changes, and or technical changes without notification

Specification

| Characteristic | Transmitter |
|---------------------------------|--|
| Dimensions | 109mm(W) x 109mm(L) x 108mm(H) ±1mm 4.3"(W) x 4.3"(L) x 4.25"(H) ±0.1" |
| Weight | 227g (8oz) including battery |
| Housing material | UV Stabilized Polypropylene (compatible with Oil) |
| Operating temperature | -17°C to +50°C (0°F to +122°F) Note 1 |
| Recommended storage temperature | +20°C to +25°C (+68°F to +77°F) clean, cool, dry and ventilated. Note 1 |
| Humidity range | 15% - 95% |
| Altitude range | <2Km (<6,000') above sea level |
| Environmental Protection | IP67 – Outdoors |
| Wi-Fi standard | Supports 802.11 b/g/n Wi-Fi |
| Frequency | 2.412GHz to 2.462GHz |
| Output power | 15dBm ±3dBm (as measured into the internal antenna on the PCB; internal antenna gain = -3dB) |
| Gauge Type | Ultrasonic |
| Ultrasonic Range | >12cm to <300cm (>5" to <115") Note 2 |
| Ultrasonic Signal Diversion | 30° (Note 3) |
| Ultrasonic Resolution | ±1cm (±0.5") |
| Accuracy | Typically ±2cm (±1") |
| Material compatibility | (Note 4) |
| Battery type | 3.6V Li-SOCl ₂ Size R14 (C) (such as Saft LSH14) |
| Expected battery life | Up to 7.5 Years from activation (Note 5) |
| Enclosure colour | Olive green - Pantone 376C (adapter – Black) |

Accessories

| | |
|-----------------------|---|
| Tank mounting options | Fits directly into female 1 ¼", 1 ½" or 2" BSP threads. 2" recommended. |
| Gasket (included) | Material EPDM 89mm(Ø) x 4mm(H) ±1mm (3.5"Ø x 0.16"(H) ±0.1" Distance between hole centres 50mm ±1mm (2" ±0.1") |
| Antenna (optional) | Available with an external Wi-Fi antenna SMA connector. Contact Tekelek for details (Note 6) |

Conformity

Complies with current Directives for Electromagnetic compatibility and the Low voltage directive for product safety and the current R&TTE directive for radio. Compliance was demonstrated to the following specifications as listed in the official journal of the European Communities.

| | |
|----------------|---|
| EN 55022,A1,A2 | Limits and methods of measurement of radio disturbance characteristics of information technology equipment. |
| EN 61000-4-2/3 | Electromagnetic compatibility |

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| | |
|--------------------|---|
| EN 301 489-1 | ERM and EMC standard for radio equipment and services Part1 |
| EN 301 489-7 | Electro-magnetic Compatibility and Radio Spectrum Matters (ERM); Electro-magnetic Compatibility (EMC) Standard for Radio Equipment and Services; Part 7: Specific Conditions for Mobile and Portable Radio and Ancillary Equipment of Digital Cellular Radio Telecommunications Systems (GSM and DCS) |
| ETSI EN 301 489-17 | Electromagnetic compatibility and Radio spectrum Matters (ERM); Electromagnetic Compatibility (EMC) |
| FCC compliance | FCC ID: S6T750 |
| RoHs Compliance | Yes |

Note 1: Storage and operation above 25°C/77°F may reduce battery life. Shelf life recommended not to exceed 12 months

Note 2: Based on a measurement to a flat liquid target of size 30cm² / 4.7"

Note 3: The maximum spatial diversion of the ultrasonic signal will be < 30° from the central axis of the transducer.

Note 4: Suitable for use in tanks for the storage of water diesel fuel, kerosene, gas oil types A2, C1, C2 and D as defined by BS2869.

Note 5: Based on activation within 1 year of the manufacturing date of the product, and device configuration for 4 ultrasonic measurements per day, 1 Wi-Fi connection per day from a location where the Wi-Fi coverage does not require retries, and a normal distribution over the operating temperature range centered at +25°C (77°F).

Note 6: If used in an external environment, installer must apply self-amalgamating tape to the external antenna-SMA connector join to ensure it is weather proofed. The antenna gain characteristics should be < 6dBi to ensure FCC compliance.

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