

Smart Monitoring  
UK & Ireland

# WATCHMAN® Product Guide

Award winning  
monitoring solutions  
for liquid energy



kingspan.com



# Award Winning Monitoring Solutions for Liquid Energy

We are global leaders in on-site tank monitoring systems, having invested in and driven technological innovation across the sector for the last 20 years.

Our affordable monitoring systems allow you to monitor your stocks of fuel, heating oil, AdBlue®, lubricant, liquids, LPG, materials (bulk storage), liquid fertiliser, water, and much more.



Agriculture

**On-site Protection & Monitoring**  
Our simple-to-use technology allows farmers to keep an eye on stocks and order replenishments in good time, avoiding the stress and extra cost of an emergency purchase.



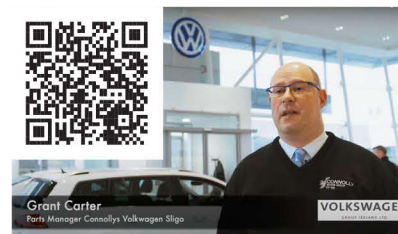
Domestic

**“Alexa, When Will I Run Out of Oil?”**  
The Kingspan SENSiT WiFi tank level gauge enables you to monitor your heating oil supplies via your phone. It’s even integrated with Alexa!



Facilities Management

**Monitor Stock Levels 24/7**  
“Stock management is critical to our business and the excellent service Kingspan provided from the initial install to the after sales support has been crucial to the success of this project”  
**Emanuel Trindade, Volkswagen Group Ireland**



# Tank Monitoring Tailored to Your Needs

Our monitoring systems measure the amount of fuel, oil, or other liquid within a tank and then provide you with this data either on an electronic device attached to the tank, or send it to a mobile phone, tablet or laptop. You can check your supplies, day or night, wherever you are based.



Haulage & Logistics

**Optimum Fuel Management**  
Gaughran Brothers Transport Ltd turned to Kingspan’s fuel monitoring system to improve stock management of its diesel and AdBlue® supplies.



Fuel Oil Distributors

**Harness Your Data**  
Our intelligent systems have the capability to monitor tanks across your business giving you full transparency on the performance of your tank population.



Our smart tank monitoring devices are widely used in haulage and logistics, agriculture, facilities management and to monitor domestic heating oil supplies.

Not surprisingly, we therefore have a large range of monitoring technology for you to choose from!



## Benefits



Peace of mind – never run out of oil again!



Get updates sent to your phone



Manage your oil 24/7



Safeguard your supplies with sudden-drop alerts



Reduces risk of local pollution incidents (overfilling tanks)



Provides full, customised reporting



Supports legal compliance



Group and organise flexible deliveries



Customer Retention



Restock in a timely manner – and when prices are lowest



Efficient stock management and procurement



# Remote Tank Monitoring Platforms

## Connect Sensor® & Kingspan Connect®

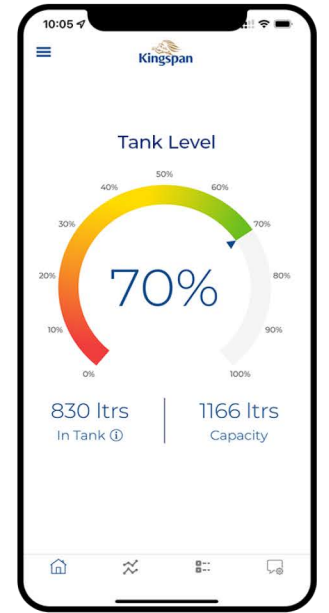
The world's most cost effective remote telemetry reporting platforms.

Our central, secure and fully scalable Connect Sensor and Kingspan Connect platforms offer cost effective data transfer for businesses right across the world. These systems provide scheduled, bespoke reports using data transmitted from our central secure database. The customer can also access the data remotely on their phone or tablet using the Kingspan Connect App.

The Connect Sensor and Kingspan Connect telemetry solutions give total control and visibility over all areas of your business, helping you monitor costs, energy usage and much more.



### Kingspan Connect App



### How it works:



01

Install the hardware



02

Data sent and hosted on a secure database



03

Data and reports can be accessed by email, mobile, desktop or API



04

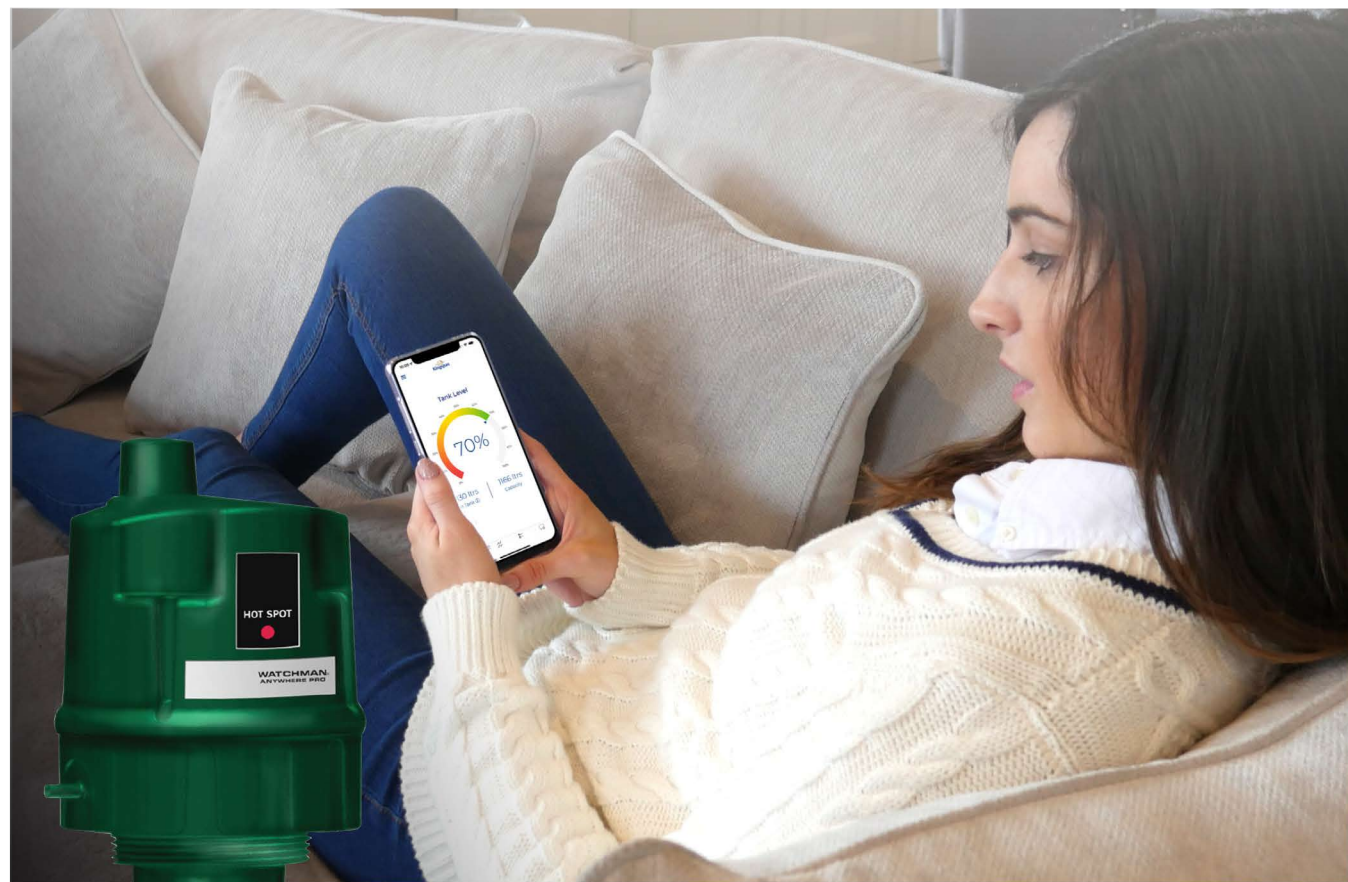
With quick and easy reports, helps speed up decision making and optimise your business





# Remote Tank Monitoring System

## WATCHMAN® Anywhere PRO



### Remote tank monitoring system for business and industry

Watchman Anywhere PRO can continually monitor every tank in your business. From diesel to waste oil and a vast range of common liquids, you'll have full transparency about the performance of your tank population. Watchman Anywhere PRO provides in-depth data that you can view anywhere, anytime. The one-piece monitoring unit is easily installed and has a battery life up to 5 years.

CHARACTERISTIC	TRANSMITTER
Operating Temperature	-20°C to 50°C
Environmental Protection	IP67 - Outdoors
Connectivity	2G/3G (NB-IoT/CAT-M1 - optional)
Gauge Type	Ultrasonic
Ultrasonic Range	>12cm to <4m
Measurement Accuracy	+/- 2cm
Battery Life	up to 5 Years

### Features & Benefits

- Data transfer available via cloud, FTP, email or API
- Low Level Alert/ Threshold Alert
- Consumption Data
- Projected Run Out Date
- Sudden Drop Alert (Domestic usage only)
- Fill Volume
- Liquid Level



# Local Tank Monitoring System

## WATCHMAN® Uni<sup>RX</sup>

Universal receiver for fuel, chemicals, solids and waste oil when you require more than just level measurement

This device is a handy universal receiver for heating oil and waste oil measurement. It's compatible with all existing Kingspan Smart Monitoring gauges and industry standard 4-20mA sensors.

CHARACTERISTIC	TRANSMITTER
Operating Temperature	0°C to 40°C
Environmental Protection	Indoor use only
Radio Frequency	433MHz
Gauge Type	Watchman Sonic/Pressure Gauge/Watchman LT, any 4-20mA sensors



### Features & Benefits

- Low Level Alert / Threshold Alert
- Leak alarm indication+ audible notification
- Two fully configurable relay outputs (up to 240V, 500mA)
- RS232 interface
- Buzzer (80dB)
- Level measurement using ultrasonic or 4-20mA sensor
- Display level in 'Litres', 'cm' and '%'
- Waste Oil Mode Option
- Easy to use screen menu with wizard setup
- Sudden drop alarm indication and audible notification\*

\*only available with Watchman Alarm



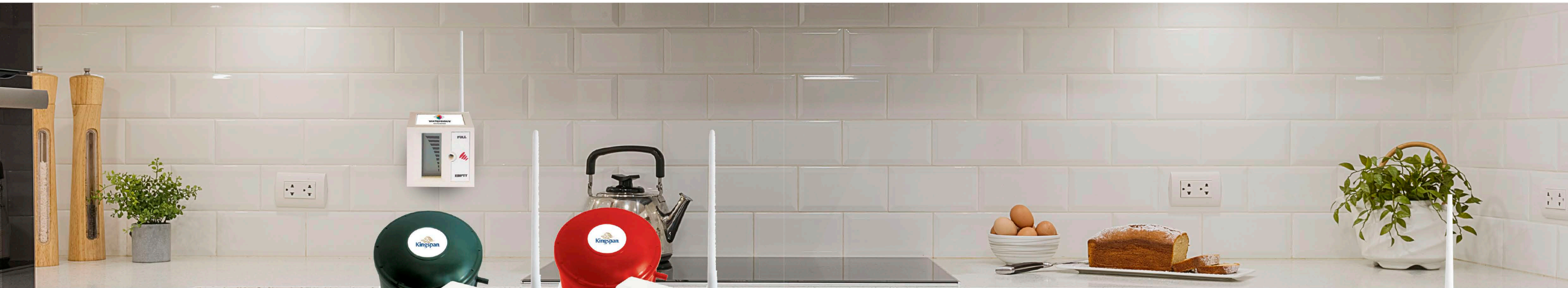
# Local Tank Monitoring System

**WATCHMAN®** Sonic  
**WATCHMAN®** Alarm



# Local Tank Monitoring System

**WATCHMAN®** Sonic Advanced











Monitor your liquid levels from the comfort of your own home, giving you peace of mind that you won't run out



Watchman Sonic

Watchman Alarm

### Features & Benefits

-   
Suitable for steel or plastic tanks
-   
One model fits all
-   
Audible buzzing tone when liquid levels run out
-   
Measures tanks up to 3 metres in height
-   
Sudden Drop Alert\*
-   
Quick and easy to install
-   
Low power consumption
-   
200 metre transmitter to receiver range










CHARACTERISTIC	TRANSMITTER
Operating Temperature	-10°C to 50°C
Environmental Protection	RX Indoor use only; TX - IP67
Radio Frequency	433MHz
Gauge Type	Ultrasonic
Receiver Level Display	10% tank height per bar
Ultrasonic Range	0,5-3m
Measurement Accuracy	+/-2cm

\* Available on Watchman Alarm only

The revolutionary electronic measuring gauge that shows how much liquid there is in your tank and sets off an alarm when there is a sudden drop in liquid levels



### Features & Benefits

-   
Quick and easy to install and one model fits all
-   
Unique Serial Number
-   
Suitable for steel or plastic tanks
-   
Sudden Drop Alarm (ON/OFF)
-   
Waveguide Mode (ON/OFF)
-   
Low power consumption
-   
200 metre transmitter to receiver range
-   
Measures tanks up to 3 metres in height
-   
Audible buzzing tone when liquid levels run out

CHARACTERISTIC	TRANSMITTER
Operating Temperature	-10°C to 50°C
Environmental Protection	RX Indoor use only; TX - IP67
Radio Frequency	433MHz
Gauge Type	Advanced Ultrasonic
Receiver Level Display	10% tank height per bar
Ultrasonic Range	12cm - 3m
Measurement Accuracy	+/-2cm



# Remote Tank Monitoring System WATCHMAN® SENSiT

A tank level gauge that enables you to monitor your liquid levels through an easy-to-use smartphone app



Compatible with Alexa



Connects to our mobile app - Kingspan Connect



Scan to watch Installation Video

## Features & Benefits

- Easy to install
- Long Transmitter Battery Life up to 3 years
- Waterproof Transmitter
- Compatible with Alexa
- Wifi Connection
- Live Sudden Drop Alerts
- Predicted run out date
- Consumption data

Stay informed and check your tank levels from anywhere with the SENSiT smart tank level monitor

This neat kit is a brilliant way of staying in complete control without being tied to a single location.

One off payment, no additional fees.

Monitor up to 3 devices with one login.



\* Screws are included inside the pack



USB Receiver



Watchman Sonic Advanced Transmitter



SENSiT Quickstart Manual



Watchman Sonic Advanced Install Manual



# Remote Tank Monitoring WATCHMAN® SENSiT USB Receiver Device

USB receiver device that allows you to access smartphone app features on your Watchman SENSiT ready oil tank.

If you have a Watchman SENSiT ready tank, you can upgrade by getting a Watchman SENSiT USB receiver and take advantage of all the Watchman SENSiT Benefits.

## All you need to do is:

- Make sure your tank is Watchman SENSiT Ready or has the Watchman Sonic Advanced
- Get the SENSiT USB receiver
- Download 'Kingspan Connect' mobile app
- Plug in your USB receiver to a 5V DC power supply\*
- Follow easy step-by-step instructions on the app
- And enjoy!



Simple and easy to set up Scan the QR Code to watch the 'Easy to install' video:

## Features & Benefits

- Consumption Monitor track the usage in your household
- Predicted Run Out Date you'll never run out of oil
- Level Alerts peace of mind
- Sudden Drop Alerts
- Compatible with Alexa
- Wifi Connection
- Easy to Install

CHARACTERISTIC	USB RECEIVER
Operating Temperature	-10°C to 60°C
Storage Temperature	-20°C to 60°C
Operating Humidity	20% to 80% non-condensing altitude range
Environmental Protection	Indoor use only
Radio Frequency	433.92 MHz FM (EU/UK/NZ/AUS)
Altitude Range	2km above sea level
Sensit to Transmitter Range	200m**
Power Requirements	(DC) 5VDC
Power Connector	USB A
Operating Platform	Via App (Android, IOS)
Dimensions	84mm x 25mm x 15mm
Weight	40g

\*Power supply not included in the pack

\*\*200m in normal "line of sight" conditions. The effective range of this product can be influenced by external sources that may reduce the range of the transmitter or sensitivity of the receiver

# Remote/Local Tank Management System

## WATCHMAN® Access



### Intelligent fluid and fleet management solution

Watchman Access terminal is a device which provides complete control and visibility over distributed fuel in your tank to keep your business moving.

As system administrator, you can regulate liquid usage by controlling access rights for individual employees and vehicles. It enables you to efficiently manage multiple tanks and see the filling level of each tank, refilling as required. Real time data and customised reports allow you to make quick and smart decisions.

- Real time communication between terminals and cloud based platforms
- Connect anywhere anytime via Wi-Fi, GSM, LAN
- Unlimited operations, users and vehicles
- Safe identification with unique RFID cards/fobs



#### Features & Benefits

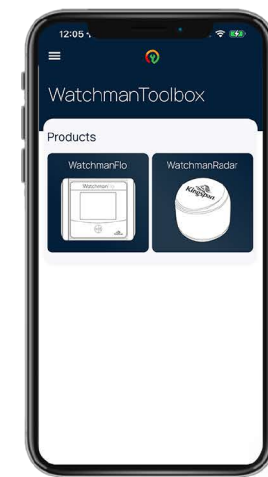
<b>Current status:</b> ▪ Level ▪ Fluid Temperature ▪ Total usage ▪ Capacity of tank	<b>Save Money</b> Live reports, level and control	<b>Active Graph</b> Level and fluid temperature	<b>Safe</b> Active GPS Tracking	<b>Database:</b> ▪ Tank ▪ User ▪ Vehicle ▪ RFID cards ▪ Actions
<b>Easy to use</b> Remote control, supervision and push notifications	<b>Personalised Reports</b>	<b>Alerts List</b>	<b>Live Remote Fluid Level Data</b>	<b>Recent Activities</b>



# Local/Remote Tank Monitoring System

## WATCHMAN® Flo

### Intelligent flow, level and dispensing measurement system



WatchmanToolbox App\*



\*for configuration only. Available on the appstore and google play



#### Features & Benefits

<b>Level Management</b> Control and visibility over liquid levels	<b>Flow Management</b> visibility when dispensing	<b>Leak detection</b>	<b>Overfill detection</b>
<b>Low/High Level alarms</b> never run out	<b>Cloud based software mobile app</b>	<b>Refuelling memory</b> previous refuelling history (max 10)	<b>Pump and Nozzle control</b> make refilling easier

CHARACTERISTIC	TRANSMITTER
Operating temperature	-20°C ÷ +40°C
Environmental Protection	In door use only
RadioFrequency	433.92 MHz
Cloud Communication	NBLoT
Dimensions	151 x 125 x 60 mm
Mounting Type	Wall Mounted
Compatible with	Watchman LT, Watchman Sonic Advanced/Plus, 4-20mA probes
Bluetooth	4.2

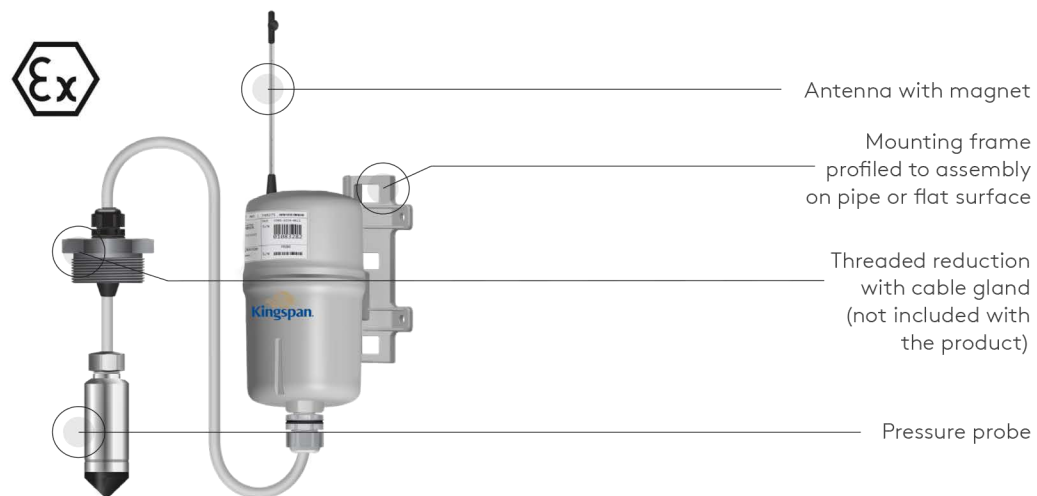


# Remote Tank Monitoring System WAPex

New versatile telemetry system for remote tank monitoring

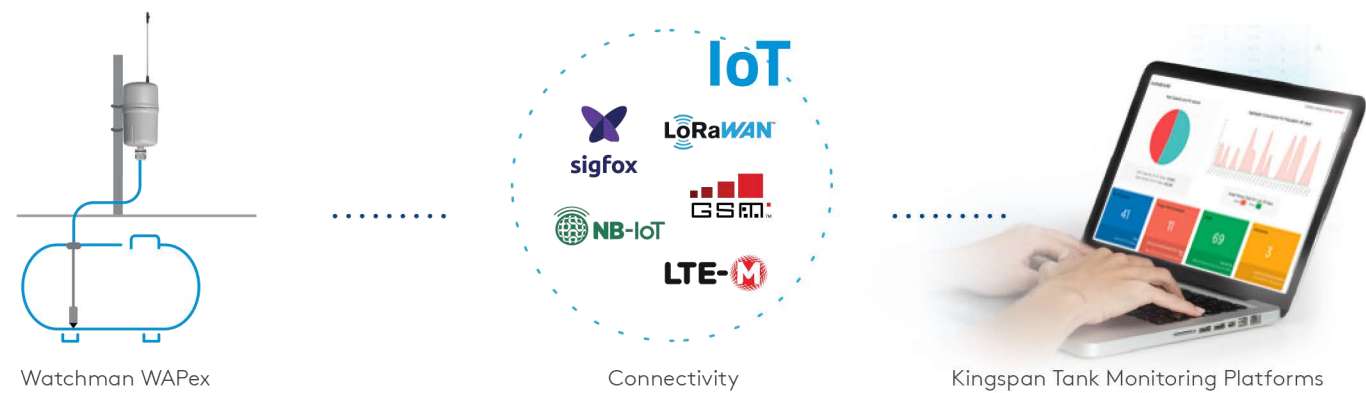
## Features & Benefits

- Easy to install no additional powering or external power needed
- GPS tracking can track the location of the tank
- Long battery life up to 5 years
- Robust Housing
- Waterproof IP68



CHARACTERISTIC	TRANSMITTER
Operating Temperature	-20°C to +50°C
Environmental Protection	IP68
Connectivity	2G (4G/LTE/NB-IoT/CAT-M1 - optional)
Gauge Type	Pressure Probe 0.5V~4.5V DC (4-20mA optional)
Dimensions	W108 x H188 (with antenna) x D66 mm
Tank Height	up to 10m*

\*depending on the product version



Watchman WAPex

Connectivity

Kingspan Tank Monitoring Platforms



# Commerical Tank Monitoring WATCHMAN® LT



## New commercial gauge for large tank monitoring

The Kingspan Watchman LT sensor is a ruggedly designed ultrasonic transmitter that provides reliable continuous level or distance measurement of fluids, pastes, or solid bulk materials. Incorporating state-of-the-art ultrasonic technology and processing algorithms, all Watchman LT models provide precision non-contact measurement for applications such as factory automation, process control or tank level monitoring.



## Features & Benefits

- Plug & play with Watchman Flo and Watchman UniRX
- Continuous Reading
- Narrow beam & short dead zone
- PVDF enclosure for chemicals & acids
- Low Cost
- Temperature Compensated
- Long Product Life
- High Accuracy

CHARACTERISTIC	TRANSMITTER
Operating Temperature	-40°C to 85°C
Environmental Protection	IP67
Gauge Type	4-20mA Ultrasonic
Measurement Accuracy	± 0.2% of Target Range
Application Ranges	200 mm to 6.5m
Ultrasonic Range	6.5m
Supply Voltage	24 to 36 V DC



# Liquids Compatibility

Compatibility	Watchman WAP	Watchman UNI <sup>RY</sup> *	Watchman WAPex	Watchman Alarm/Sonic	Watchman Sonic Advanced	Watchman SENSIT	Watchman Access*	Watchman Flo*	Watchman LT
Home Heating Oil	•	•	•	•	•	•	•	•	•
Gas Oil & Diesel	•	•	•	•	•	•	•	•	•
Lubricant Oil	•	•	•	•	•	•	•	•	•
Liquids/ Additives	•	•	•	•	•	•	•	•	•
AdBlue <sup>®</sup>	•	•	•	•	•	•	•	•	•
Waste Oil	•	•	•	•	•	•	•	•	•
Water	•	•	•	•	•	•	•	•	•
Liquid Fertiliser	•	•	•	•	•	•	•	•	•
Chemicals (non aggressive)	•	•	•	•	•	•	•	•	•
Chemicals (aggressive)		•	•				•	•	•
ATEX			•						
Solids		•						•	•

\* It depends on the gauge type (sensor) used with the receiver.

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