

WATCHMAN[®] Radar Installation Guide

EN Installation Instructions

FR Instructions d'installation

DE Installationsanleitung

PL Instrukcja instalacji



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Warranty:
Failure to follow the instruction or any modifications/ alternations in the operations described in this instruction may void the warranty.

Coverage:
Always consider the quality of IoT network coverage in a place of device installation, e.g. devices may not be well communicated when installed on underground tanks, under manhole or paving. Objects like trucks, cars or walls shall be considered as barriers with possible influence on signal quality seen by an IoT device.

EN

This operating and safety manual contains important guidelines and warnings. Read this manual carefully and follow all the guidelines contained within.

This manual is intended for information purposes only and should not be regarded as a source of law. Compliance with the instructions does not provide exemption from the requirement to comply with the Safety Data Sheet for the substance stored, local Health and Safety guidelines, as well as guidelines relating to fire prevention and environmental protection, and in particular the provisions of the ADR on international carriage of dangerous goods by road.

The manufacturer is not liable for any loss or damage caused by improper use of the product and failure to comply with applicable regulations.

IMPORTANT! READ CAREFULLY BEFORE USE. KEEP FOR FUTURE REFERENCE.

The authors of this publication have taken all effort to ensure the information contained within to be accurate.

The manufacturer reserves the right to change the specifications of the discussed or presented products and the content of this manual at any time. All rights reserved.

FR

Le pr sent mode d'emploi contient des recommandations et des avertissements importants. Veuillez le lire attentivement et respecter ses dispositions.

Le mode d'emploi est un document accessoire qui n'est pas un texte rglementaire. L'application des recommandations du mode d'emploi ne dispense pas l'utilisateur de son obligation de respecter les dispositions de la fiche des donnes de scurit, rglementation locale en matire de scurit au travail, de protection contre l'incendie et de protection de l'environnement et notamment des dispositions de l'accord ADR relatif au transport des marchandises dangereuses.

Le fabricant ne saurait tre tenu responsable des pertes ou des dommages caus s par une exploitation incorrecte du produit ou par le non-respect de la rglementation en vigueur.

IMPORTANT ! LIRE ATTENTIVEMENT AVANT D'UTILISER LE PRODUIT. CONSERVER POUR TOUTE RFERENCE ULTERIEURE.

Le fabricant a pris soin pour vous fournir des informations pr cises dans ce document. Le fabricant se rserve le droit de pouvoir modifier tout moment les paramtres des produits dcrits ou prsents. Tous droits rservs.

DE

Diese Bedienungs- und Sicherheitsanleitung enth lt wichtige Vorgaben und Warnungen. Sie ist aufmerksam zu studieren, alle in ihr enthaltenen Richtlinien sind einzuhalten.

Die Anleitung hat Hilfscharakter und stellt keine Quelle geltenden Rechts dar. Die Einhaltung dieser Anleitung befreit nicht von der Pflicht zur Anwendung der im Sicherheitsdatenblatt des gelagerten Produkts enthaltenen Richtlinien, der lokalen Arbeitsschutz-, Brandschutz- und Umweltschutzvorschriften sowie insbesondere der ADR-Vorschriften ber die Bef rderung von Gefahrgutern.

Der Hersteller haftet nicht fr Schden und Verluste durch eine inkorrekte Anwendung des Erzeugnisses und fr die Nichteinhaltung dergeltenden Rechtsvorschriften.

WICHTIG! VOR ANWENDUNG STUDIEREN. ZUR EINSICHT IN ZUKUNFT AUFBEWAHREN.

Wir haben alle angemessene Sorgfalt aufgewendet, um sicherzustellen, dass die in dieser Publikation enthaltenen Informationen korrekt sind. Der Hersteller behlt sich das Recht vor, jederzeit nderungen an den Spezifikationen der beschriebenen oder vorgestellten Produkte vorzunehmen. Alle Rechte geschzt.

PL

Niniejsza instrukcja obsugi i bezpiecze stwa zawiera wane zalecenia i ostrzeenia. Nale y uwa nie si z ni zapozna i przestrzega wszelkich zawartych w niej wytycznych.

Instrukcja ma charakter pomocniczy i nie stanowi zr dła prawa. Zastosowanie si do instrukcji nie zwalnia z obowizku stosowania wytycznych zawartych w karcie charakterystyki sk adawanej substancji, lokalnych przepisach BHP, PPO Ź i ochrony rodo wiska, a w szczeg lno ci przepis w ADR dotycz cych przewozu substancji

niebezpiecznych. Producent nie ponosi odpowiedzialno ci za szkody i straty spowodowane nieprawid owym u ytkowaniem produktu oraz nieprzestrzeganiem obowizuj cych przepis w.

WA ŹNE! PRZECZYTA UWA ŹNIE PRZED U ŹYCIEM. ZACHOWA DO WYKORZYSTANIA W PRZYS ŹO CI.

D o Ź y ł i ś m y n a l e Ź y t e j s t a r a n n o ś c i , a b y z a w a r t e w n i n i e j s z e j p u b l i k a c j i i n f o r m a c j e b y ł y d o k ł a d n e . P r o - d u c e n t z a s t r z e g a s o b i e p r a w o d o w p r o w a d z a n i a w k a Ź d e j c h w i ł i z m i a n w o d n i e s i e n i u d o s p e c y f i k a c j i o p i s a n y c h l u b p r e d s t a w i o n y c h p r o d u k t w . W s z e l k i e p r a w a z a s t r z e Ź o n e .

Read fully before installation & use

This product is to be used only on tanks within the parameters outlined in the specifications. Any use of the product on applications that lie outside these specifications is done at the users own risk.



Keep these handy before you begin.

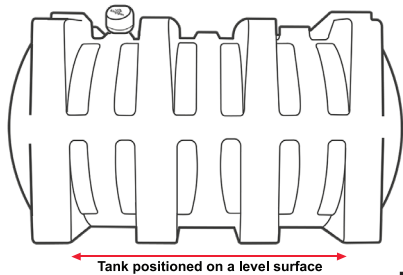


Pre-installation steps:

1. Check the tank:

Ensure before you start the install that the tank the WatchmanRadar is to be fitted:

1. Is on a flat level base.
2. Has a maximum actual tank height of 6 metres.
3. Has been fitted in accordance with manufacturers guidelines and instructions.



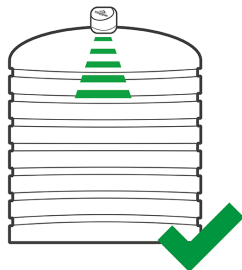
Pic 1

2. Identify the right location for WatchmanRadar installation

Choose a flat, level position for the WatchmanRadar that is no lower than maximum fill level of the tank. Take care not to choose an area where water can gather under the unit.

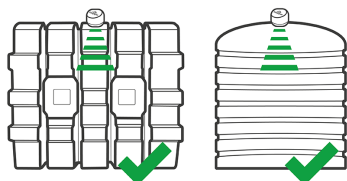
NOTE: If you are installing on a steel tank, the tank must have an existing hole where the sensor can be fitted. This gauge hole is not required for plastic tanks.

WatchmanRadar Transmitter



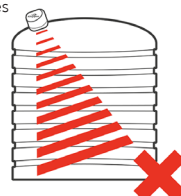
Pic 2

Choose a suitable position for the transmitter



Pic 3

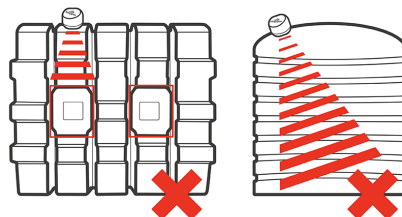
The WatchmanRadar cannot sit at an angle as this gives an incorrect level reading.



Pic 4

NB: For tanks with window corrugations or internal braces please ensure that the WatchmanRadar is not positioned above or within 10 cm of the area of the window or the edge of the tank. If the WatchmanRadar is positioned over or close to the WINDOWED area it transmits incorrect readings. (See Picture 5)

Ensure that the radar path is clear to the bottom of the tank as per pic 2.



Pic 5

3. Measure your tank

Accurately measure the tank making note of this measurement. The permissible maximum tank height is 6 metres from the base of your tank to the position of the WatchmanRadar (which should be no lower than the fill point). (See Picture 6).

Height does not include the base on which the tank sits on.

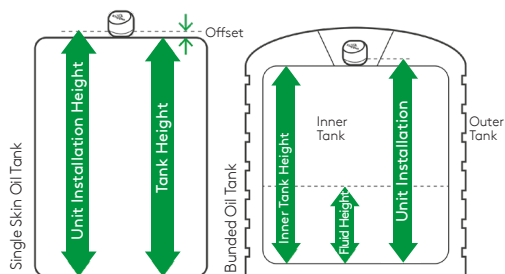
Tank Name/Model:

Capacity:..... Tank Height:.....

Installation Height:..... Offset:.....

Tank Shape: Tank Length:

Tank Width: Tank Diameter:



Pic 6

4. Installation and registration

To begin the installation download the WatchmanToolbox App and follow the steps. Do not install the unit until point D.

- Check signal is available at the installation site
- Find a suitable area on the tank to install the unit
- Clean the tank surface using alcohol wipes
- Install the base of the unit to the tank using glue or tape and level using screws provided
- Reattach the unit back to its base
- Confirm the unit has been installed flat using the spirit level in the application
- Registration

Visit our YouTube channel for installation videos.

NOTE: it is important to keep all items dry during installation.

WatchmanToolbox App



Safety Information

- Name:** Tank level sensor WatchmanRadar NB IoT / Sigfox/Lora
Type: WatchmanRadar NB IoT / Sigfox/Lora
- Versions:** WatchmanRadar NB IoT –version with cellular network radio interface
WatchmanRadar Sigfox/Lora –version with SRD radio interface
- Compliance:** See EU declaration of Conformity
- ATEX marking:** Tank level sensor WatchmanRadar is intended for use in potentially explosive atmospheres according to marking:

CE  **II 3G Ex ic IIB T3 Gc OBAC 22 ATEX 0008X**

Detailed meaning of symbols used above:

- CE** Marking signifies that the product has been assessed to meet high safety, health, environmental protection requirements and meets all required statutory requirements counted in the document “Declaration of conformity”
-  Specific marking of explosion protection
- II** Equipment group: equipment intended for use in areas in which explosive atmospheres are caused by mixtures of air and gases, vapours or mists or by air/dust mixtures
- 3** Equipment category: normal level of protection
- G** Explosive atmosphere type: mixtures of air and gases, vapours or mists
- Ex** Symbol which indicates that the electrical equipment corresponds to one of more types of protection which are subject of the specific standards
- ic** Equipment protection: type intrinsic safety, level of protection “ic”
- IIB** Group and subdivision: gas group where a typical gas is ethylene
- T3** Temperature class: maximum surface temperature is 200°C
- Gc** Equipment protection level (EPL): enhanced level of protection
- OBAC 22 ATEX 0008X** Type examination certificate number and its issuer (ATEX notified body); “X” symbol at the end indicates that specific conditions of use shall be fulfilled for safe use of the device

Technical parameters

Manufacturer:	Kingspan Water & Energy Ltd.
Ambient temperature:	-25°C...+60°C
Ingress protection:	IP67
Power supply:	Non changeable primary cell(s) 3V
Radio communication:	Cellular network; SRD (Lora/Sigfox); Bluetooth; GPS
Radio frequency range:	800 ... 2600MHz, 60GHz**
Radio power:	≤3,2W
Dimensions:	100x77mm

** - radar sensor

Specific conditions of safe use

- The device can be installed only within zone 2 of hazardous area or outside of hazardous area according to classification of EN 60079-10 standard; zones 0 and 1 are forbidden
- Ambient temperature range is -25°C...+60°C
- The device can be installed and used only if enclosure is undamaged, closed and firmly attached to proper part of a tank
- Installation of the device shall fulfill EN 60079-14 standard requirements

Installation, use, maintenance, adjustment

Installation procedure is given in the part "Watchman Radar Installation Instruction".

The device does not need additional physical activities for proper use. Maintenance is not required, there are no parts requiring access inside of the enclosure, opening it is forbidden. In case of any malfunction, the device should be carefully removed from a tank and delivered to service or exchange.

Environment



Do not throw away the appliance with the normal household waste at the end of its life, but hand it in at an official collection point for recycling. By doing this you help to preserve the environment.





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