

Product Specification



BOC Telemetry Beacon

Introduction

Devices are designed to measure the level of cryogenic liquid in different tanks.



Product Features

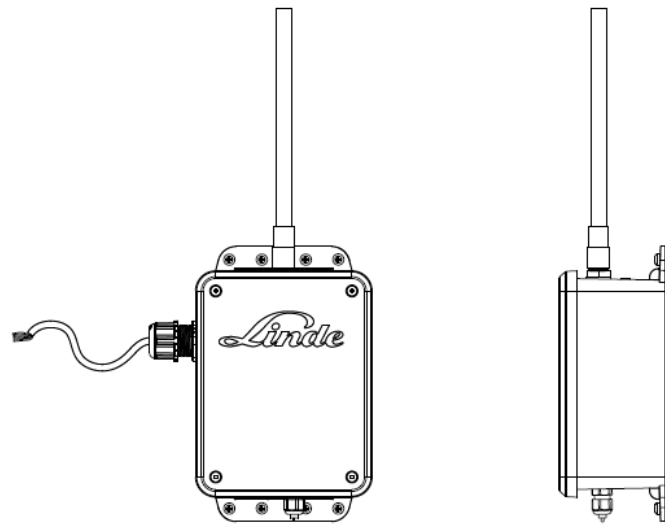
- The liquid level is measured using a sensor installed on the vessel.
- The liquid level data is passed to the cloud via LoRaWan

Mechanical Design

Enclosure Design

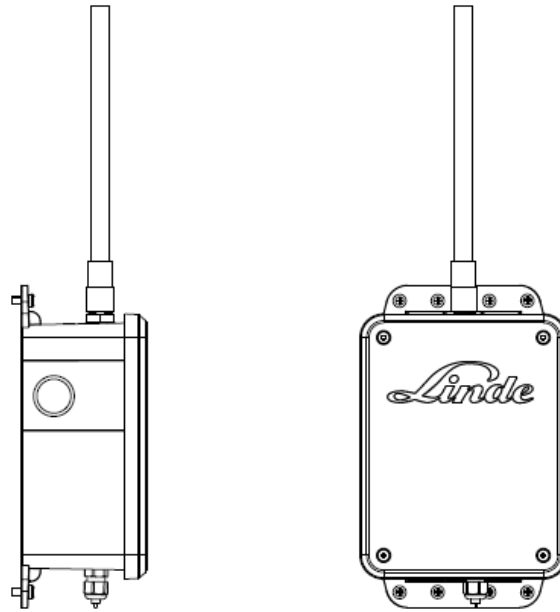
The dimension of Telemetry product is L:222 x W:141 x H:86 mm with one external antenna connector for connecting LoRaWAN antenna, and either one external communication cable or one water-proof connector to connect to atank sensor.

Telemetry Beacon 1



Port	Count	Description
Antenna connector (N-type) at top side	1	Antenna connector for external LoRaWAN antenna
Water-proof connector with sensor cable (1000mm in length)	1	The communication cable is used for connecting the tank sensor
Water-proof connector at bottom side	1	The port is reserved for connecting external 12V power source

Telemetry Beacon 2



Port	Count	Description
Antenna connector (N-type) at top side	1	Antenna connector for external LoRaWAN antenna
Water-proof connector at left hand side	1	The water-proof connector is designed for attaching external sensor
Water-proof connector at bottom side	1	The port is reserved for connecting external 12V power source

Appedix

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **20cm** between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Country Code selection feature to be disabled for products marketed to the US/CANADA

Operation of this device is restricted to indoor use only

Professional installation instruction

Please be advised that due to the unique function supplied by this product, the device is intended for use with our interactive entertainment software and licensed third-party only. The product will be distributed through controlled distribution channel and installed by trained professional and will not be sold directly to the general public through retail store.

1. Installation personal

This product is designed for specific application and needs to be installed by a qualified personal who has RF and related rule knowledge. The general user shall not attempt to install or change the setting.

2. Installation location

The product shall be installed at a location where the radiating antenna can be kept **20 cm** from nearby person in normal operation condition to meet regulatory RF exposure requirement.

3. External antenna

Use only the antennas which have been approved by the applicant. The non-approved antenna(s) may produce unwanted spurious or excessive RF transmitting power which may lead to the violation of FCC limit and is prohibited.

4. Installation procedure

Please refer to user's manual for the detail.

5. Warning

Please carefully select the installation position and make sure that the final output power does not exceed the limit set force in relevant rules. The violation of the rule could lead to serious federal penalty.