

RADius 700



KONGSBERG



Long-range battery powered transponder

The RADius 700 transponder is a part of the short-distance relative positioning system RADius. It is developed for use in applications where the need for a robust and highly accurate relative positioning system is crucial.

Easy to deploy and operate

The RADius 700 transponder is easily deployed as the unit runs on internal batteries, thus, no cable connection is necessary. The replaceable internal Lithium battery has an estimated life time of three years.

ON/OFF switching is easily done by inserting/removing the activation plug at the back of the transponder. The operating sector of the unit is 90° horizontally and vertically.

Unique identification

The transponders are coded with unique IDs ensuring reliable identification and tracking of vessels in demanding environments. Several interrogators can approach the same transponders, ensuring multi-user capabilities. Up to five transponders can be tracked simultaneously by the interrogator. The transponder has DIP switches for easy setting of the transponder ID (TID).

FEATURES

- Battery powered
- Long-range
- No moving parts
- All-weather operation
- RADius 1000/2000 system compatible

Technical specifications

RADius 700

Performance

Range

Acquisition range ¹	Up to 1000 m
DP range ²	Up to 550 m

Opening angle

Vertical	±45°
Horizontal	±45°

Transponder identification (TID)

Range	150 - 208
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Power specifications

Voltage	3.6 V, internal batteries
Current consumption	1 mA (typical)
Battery type	Lithium
Battery lifetime	3 years

Weight and dimensions

Transponder	412 × 562 × 214 mm
Weight	6 kg

Environmental specifications

Temperature range

Operational temperature	-25 °C - +55 °C
Storage short term	-25 °C - +70 °C
Storage long term	+5 °C - +30 °C (recommended due to battery)

Humidity

Operational humidity	100 % RH
Storage	60 % RH max.

Ingress protection

Transponder	IP 66
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Standards and regulations

Compliance to Radio Equipment Directive	2014/53/EU
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¹ Possible to acquire the signal, typically range only in order to verify that your reference system is available. At a certain range, the system will track both range and bearing with a large probability. However, the bearing will have limited accuracy.

² The system will be fully operational both in range and bearing.