

# RADius 550X

## The ultimate marine motion sensor



The RADius 550X transponder is a part of the short-distance relative positioning system RADius developed for use in applications where the need for a robust and highly accurate relative positioning system is crucial. The lightweight portable transponder is easy to deploy on targets for applications that require range and bearing during operation.

### Specifications

<b>Product</b>	RADius 550X
<b>Country of origin</b>	Norway
<b>Manufacturer</b>	Kongsberg Discovery

## EX certified

The RADius 550X low power transponder is an intrinsically ATEX safe product (category 2) suitable to be installed in hazardous locations where there may be an explosive mixture of flammable gases belonging to gas groups IIB and/or IIA. The transponder can be used in hazardous zones 1 and 2. IECEx classification is Ex ib IIB T4 Gb.

## Battery powered

The RADius 550X is powered from an intrinsically safe encapsulated battery with an integral current limiting resistor and has no wired connection to external equipment.

## Unique ID

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 is suited with dip switches for easy setting of the transponder ID.

## Range

<b>Operational range</b>	550 m
<b>DP range</b>	350 m

## Opening angle

<b>Vertical</b>	± 45°
<b>Horizontal</b>	± 45°

## Weights and dimensions

<b>Transponder with battery connection box</b>	400 x 220 x 147 mm
<b>Weight without clamps</b>	3.6 kg
<b>Weight with clamps</b>	4.0 kg

## Humidity

<b>Operational</b>	10 to 100 % RH
<b>Storage (recommended)</b>	20 to 70 % RH

## Ingress protection

<b>Transponder electronic unit</b>	IP 66
<b>Battery connection box</b>	IP 66

## Temperature range

<b>Operational</b>	-20 °C to +55 °C
<b>Storage short term</b>	+5 °C to +40 °C
<b>Storage long term</b>	+5 °C to +30 °C (due to battery)

## IS battery module data

<b>Type</b>	D-size, IEC 60086-1 type E
<b>Open loop battery voltage</b>	Max. 3.7 V DC
<b>Capacity</b>	19 Ah (one cell)
<b>Expected service life</b>	2 years continuous
<b>Storage time</b>	Over 10 years at temperatures between +5 °C to +30 °C
<b>Self discharge rate</b>	1 to 2 % per year at room temperatur
<b>Short circuit current</b>	Max. 9.7 mA

## Regulatory

<b>Compliance to Radio Equipment Directive(RED)</b>	2014/53/EU
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## EX certified

EC type examination certificate no. PRESAFE 17 ATEX 10742X IECEx certificate of conformity no. IECEx PRE17.0044X Inmetro certificate no. DNV 13.0035 X