

RADIUS 702



KONGSBERG



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BATTERY OPERATED TRANSPONDER

The RADIUS 702 transponder is a part of the short-distance relative positioning system RADIUS for use in applications where the need for a robust and highly accurate relative positioning system is crucial. The system comprises an interrogator, typically installed on a vessel, operating in the GHz maritime band and transponders that are typically deployed on the target. RADIUS 702 has an operating range of up to 1000 metres.

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 transponder ID setting.

Easy to deploy and operate

The RADIUS 702 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 lifetime of three years.

ON/OFF switching is easily done by inserting or removing the activate connector at the back of the transponder. The operating sector of the unit is 90 degrees horizontally and vertically.



TECHNICAL SPECIFICATIONS RADIUS 702

Range

Operational range	Up to 1000 m *)
DP range	< 550 m **)

Opening angle

Vertical	± 45°
Horizontal	± 45°

Weight and dimensions

Transponder with battery connection box	412 x 562 x 214 mm
Weight	6.0 kg

Power

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

Environmental specifications

Humidity

Operational	20 to 100 % RH
Storage (recommended)	20 to 70 % RH

Ingress protection

Transponder	IP 66
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Temperature range

Operational	-25 °C to +60 °C
Storage (recommended)	+5 °C to +40 °C

Electromagnetic compatibility

Compliance to EMCD, immunity/emission	IEC 60945 ed. 4
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*) 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.

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

Specifications subject to change without any further notice.

