

# RADIUS 700



KONGSBERG



## LONG RANGE BATTERY OPERATED TRANSPONDER

The RADIUS 700 long-range 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. RADIUS 700 has an operating range of up to 1000 meters.

### Unique ID

The transponders are coded with unique IDs ensuring reliable identification and tracking in cluttered 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 transponder ID.

### Easy to deploy and operate

The RADIUS 700 transponder is easily deployed as the unit is running 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 activate connector at the back of the transponder. Operating sector of the unit is 90° horizontally and vertically.



# TECHNICAL SPECIFICATIONS

## PERFORMANCE

### Range

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

### Opening angle

Vertical	± 45°
Horizontal	± 45°

## WEIGHT AND DIMENSIONS

Transponder	412 x 562 x 184 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	-40 °C to +60 °C
Storage (recommended)	+5 °C to +40 °C

### Electromagnetic compatibility

Compliance to EMC, 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.

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