RADIUS 700





LONG RANGE BATTERY OPERATED TRANSPONDER

The RADius 700 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 metres.

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 ID

The transponders are coded with unique IDs ensuring reliable identification and tracking 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.



PERFORMANCE

Range

Operational range 1 Up to 1000 m $\rm DP\ range^2$ > 550 m

Opening angle

Vertical ± 45°
Horizontal ± 45°

WEIGHT AND DIMENSIONS

Transponder 412 x 562 x 214 mm Weight 6.0 kg

POWER SPECIFICATIONS

Voltage 3.6 V internal batteries

Current consumption 1 mA (typ.)
Battery type Lithium
Battery lifetime 3 years

ENVIRONMENTAL SPECIFICATIONS

Humidity

Operational 100 % RH Storage (recommended) 60 % RH

Ingress protection

Transponder IP 66

Temperature range

Operational -40 °C to +60 °C Storage short term +5 °C to +40 °C Storage long term (recommended) +5 °C to +30 °C (due to battery)

Regulatory

Compliance to Radio Equipment

Directive (RED) 2014/53/EU

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

 $Specifications \ subject \ to \ change \ without \ any \ further \ notice.$

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.