

RADius 800



KONGSBERG



Fixed power transponder

The RADius 800 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. The RADius 800 transponder is suitable for fixed installations on typically a platform, an FPSO or wind turbines.

Transponder main parts

The main parts of the RADius 800 transponder equipment are:

- The transponder panel and the transponder connection box with terminals for the DC voltage cable and a DIP switch for setting the Transponder Identification code (TID).
- The transponder mounting bracket for horizontal or vertical rail mounting.
- The 5 VDC Power Supply Unit.

Fixed power

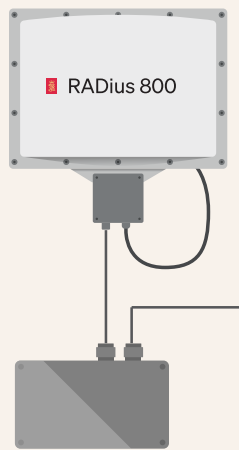
The RADius 800 transponder is powered from a 5 VDC Power Supply Unit. A location no more than 10 metres from the transponder is recommended.

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.

FEATURES

- Fixed power
- Long-range
- No moving parts
- All-weather operation
- RADius 1000/2000 system compatible
- High radar cross section



Technical specifications

RADius 800

Performance

Range

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

Opening angle

Vertical	±50°
Horizontal	±50°

Transponder identification (TID)

Range	212 - 298
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Power specifications

RADius 800 transponder

Input voltage	5 VDC from Power Supply Unit
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Power Supply Unit

Input voltage	100 - 240 VAC
Output voltage	5 VDC

Weights and dimensions

RADius 800 transponder

Transponder	562 × 569 × 214 mm
Weight without bracket	7.4 kg
Weight with bracket	9.1 kg

Power Supply Unit

Dimensions with bracket	226 × 150 × 126 mm
Weight	3 kg

Environmental specifications

RADius 800 transponder

Operating temperature	-20 - +60 °C
Storage temperature	+5 - +40 °C (recommended)
Operating humidity	20 - 100 % RH
Storage humidity	20 - 70 % RH (recommended)
Ingress protection:	
Transponder panel	IP66
Transponder conn. box	IP66

Power Supply Unit

Operating temperature	-20 - +60 °C
Storage temperature	+5 - +40 °C (recommended)
Operating humidity	20 - 100 % RH
Storage humidity	20 - 70 % RH (recommended)
Ingress protection	IP66

Standards and regulations

Compliance to Radio Equipment Directive (RED)	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.

Specifications subject to change without any further notice.