

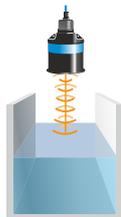


- Latest FMCW radar technology
- Insensitive to gas, pressure, mists or temperature fluctuations
- Compatible with all NivuMaster versions
- Measures through plastic containers
- Compact and easy to install
- Robust and flood-proof IP68 housing
- ATEX Approval for Zone 0/1

R-Series Sensors

R - Series Radar Sensors

The new R-Sensor is a radar sensor for continuous and contactless level measurement in liquids, pastes, sludges and bulk solids.



Measurements are not affected by changing media, temperature fluctuations, gas overlays or vapours. The radar sensor utilises the latest 63 GHz FMCW technology which, compared to pulsed radar methods, has several advantages:

- Improved spatial allocation
- Larger dynamic range
- More reliable surface detection

Therefore, it is very easy to retrofit existing equipment setups after updating the firm-ware.

R-Series sensors provide accurate measurement values in closed tanks or outdoor applications (e. g. dams, rivers etc.).

A very low dead zone and the narrow beam angle allow for reliable measurements even in confined spaces.

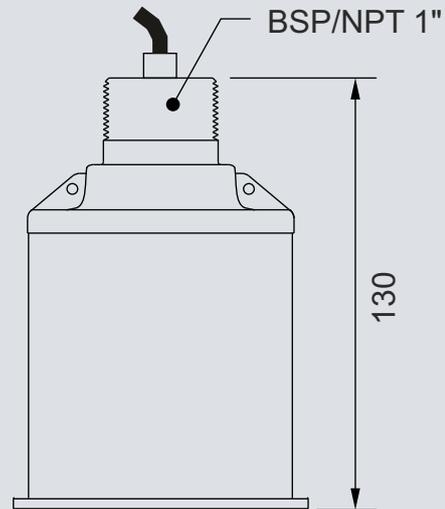
R-Sensors are compatible with all NivuMaster versions.

Sensor

Measurement principle	FMCW Radar
Measurement frequency	63 GHz / V-Band
Measurement range	R8/R8z: 0,077 - 8 m R16/R16z: 0,077 - 16 m
Measurement uncertainty	± 2 mm
Resolution	± 1 mm
Protection	IP68 / NEMA 6P
Radio approval	EN302-729:2016 (Level Probing Radar)
Beam angle	8°
Operating temperature	- 40 °C ... + 80 °C
Cable length	5/10/20/30/50/100 m
Cable type	3 x 0.5 mm shielded
Outside cable diameter	8.1 mm
Cable extension	3-wire shielded (e.g. 3 x 0.75 mm shielded)
Power consumption	0.6 W typical
Power supply	28 V DC max.
Weight	1.1 kg
Dimensions	130 x 90 mm
Enclosure material	Valox 357U
Connection thread	1" BSP/NPT

The firmware of the following NivuMaster units can be updated:
NivuMaster as of version 7.50, NivuMaster L-2 as of version 2.10

Dimensions



Dimensions in mm or inch

With the Vario mounting kits NIVUS offers accessories perfectly suited for quick and easy sensor installation. **We are happy to provide you with detailed drawings on request.**



You can find more details in the Instruction Manual or on www.nivus.com