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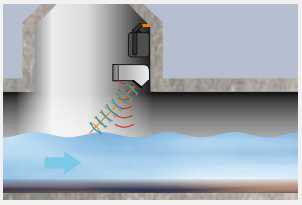

NivuFlow Mobile 550

For contactless flow metering with Radar-Doppler in part filled pipes and channels. The well thought-out power management and the built-in modem allow long-term measuring with automatic data transmission.

NivuFlow Mobile 550 permits contactless flow metering in a variety of different situations. Hydraulic algorithms determine the exact flow profiles for almost all shapes.

The modern operating concept via web browser in connection with tablet, smartphone etc. is intuitive and enables quick commissioning. Here, a quick start assistant guides through the most relevant parameter settings. While setting parameters, the remaining operation time is indicated in days. The optional built-in modem provides automatic data transmission via e-mail, FTP or to the NIVUS WebPortal. The energy-efficient system allows for accurate scheduling of maintenance visits and very long operation times.

Typical Applications

- WWTP intakes
- Irrigation channels
- Tributaries

NIVUS GmbH • Im Taele 2 • 75031 Eppingen, Germany • Internet: www.nivus.com
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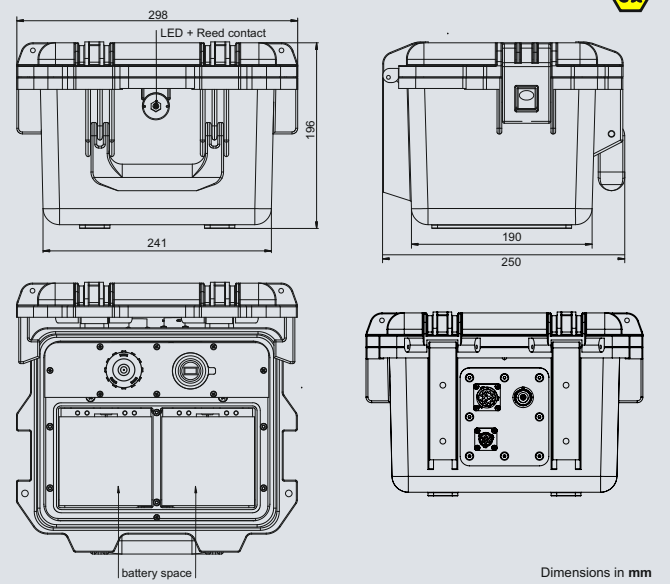
Specifications

Transmitter



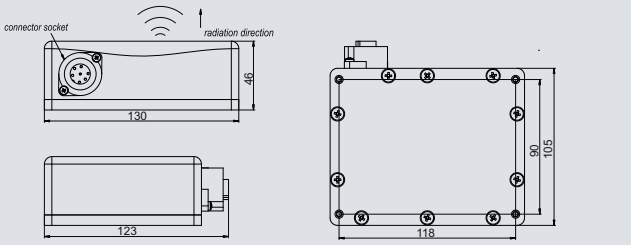
Dimensions in **mm**

Transmitter

Measurement principle	Doppler Radar
Power supply	• 2 x rechargeable batteries 12V/15 Ah, lead gel • charger 100 - 240 V AC / 50 to 60 Hz / 50 VA
Enclosure	• Material: HPX high-performamce synthetic resin • Weight: approx. 4.7 kg (without battery and hoop guards) • Protection: IP68 closed / IP67 open
Operating temperature	- 20°C to + 50°C / - 15°C to + 50°C for Ex-Zone 1
Storage temperature	- 20°C to + 70°C
Max. humidity	90 %, non-condensing
Display	via mobile device; status LED (RGB)
Ex-Approval	Optional: II 2G Ex eb ib [ib] mb IIB T4 Gb TÜV 17 ATEX 196722 X / IECEx 18.0008X
Operation	Magnetic switch, via WiFi using smartphone, tablet, notebook…
Inputs	• 1x socket for OFR-Radarsensor or ConnectorBox for external mains adaptor or power supply as well as: • 2x 0/4 - 20 mA (active/passive) • 1x 0/4 -20 mA (passive) • 1x active digital input • 1x level sensor socket • 1x antenna socket
Outputs	• via ConnectorBox • 1 x analog output 0 - 10 V • 1 x potential-free digital output as SPDT / bistable • 1 x USB or readout of values via USB stick
Storage cycle	5 sec. - 360 min, continuous, cyclic or event-based
Data memory	Internal memory, covering a period of 1.5 years
	at a measurement interval of 5 minutes
Data transmission	• Via plug-in USB stick • Via WLAN • Via GPRS, UMTS, LTE
Operation time	~1 year on one battery charge* (two batteries)

*calculated value with storage cycle 60 minutes and daily data transmission. Value may vary according to measurement spot or age of batteries

Radar Sensor, Type OFR

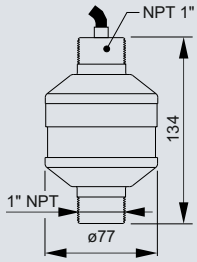


Dimensions in **mm**

OFR Radar Sensor

Measurement method	Radar - 24 GHz - ISM band
Measurement range	± 0.15 m/s - 15 m/s
Temperature range	-30 °C to 70 °C -20 °C to 60 °C in ATEX Zone 1
Measurement distance to surface	0.05 m - 10 m
Minimal wave height	~ 3 mm
Protection	IP 68 - completely encapsulated
Enclosure material	Polyoxymethylene (POM)
Interface	RS485 for connection to NivuFlow or NivuFlow Mobile transmitters
Measurement uncertainty	± 0.5 % of raw measurement value; ± 0.01 m/s (rel. to surface velocity)
Ex Approval	II 2 G Ex ib IIB T4 Gb; TÜV 16 ATEX 185271X;IECEx 16.0034X

Type NMIxxx...



Dimensions in **mm**
Type i-3

i-Series Level Sensor

Measurement method	Ultrasound
Measurement range	0.125 m to 10 m (15 m optional)
Power supply	10 - 28 V DC
Outputs	HART® – loop powered (2-wire) 4 - 20 mA (3.8 - 22 mA)
Functions	level, distance, empty space, volume and linearisation using 16 breakpoints
Operating temperature	-40 to 80 °C
Configuration	PC software for parameter setting, echo evaluation, linearisation and agitator avoidance
Sensor body material	Valox 357 PBT, optional: PVDF
Protection	IP68
Ex Approval	II 2G Ex mb IIC T4 Gb / II 1G Ex ia IIC T4 Ga TRAC12ATEX0031X / TRAC12ATEX0030X
Startup time	4 sec. typical
Measurement uncertainty	0.25 % (Type i-3)
Resolution	2 mm (Type i-3)

The complete technical specifications can be found in the Technical Documentation or on **www.nivus.com**

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