

NivuMaster

Level Measurement
with Ultrasonic
Sensors

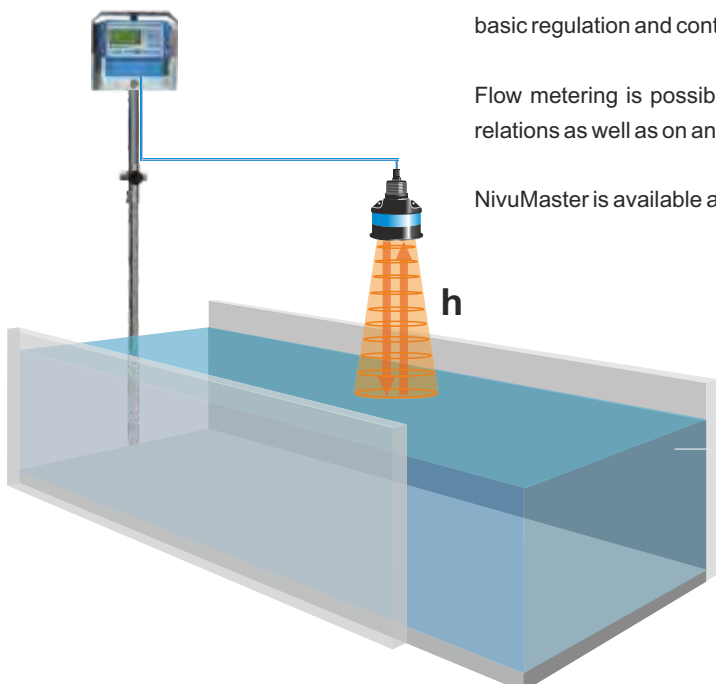


NivuMaster - optimum Level Measurement

NivuMaster-Series transmitters supply connected P-Series sensors, process the measurement values and indicate the readings. The NivuMaster units are ideally suited for basic regulation and control tasks in level measurement applications.

Flow metering is possible without any problems in open channels using Venturi or Q/h relations as well as on any kind of weirs or overflow sills .







NivuMaster is available as wall mount enclosure, 19" plug-in or panel mount version.



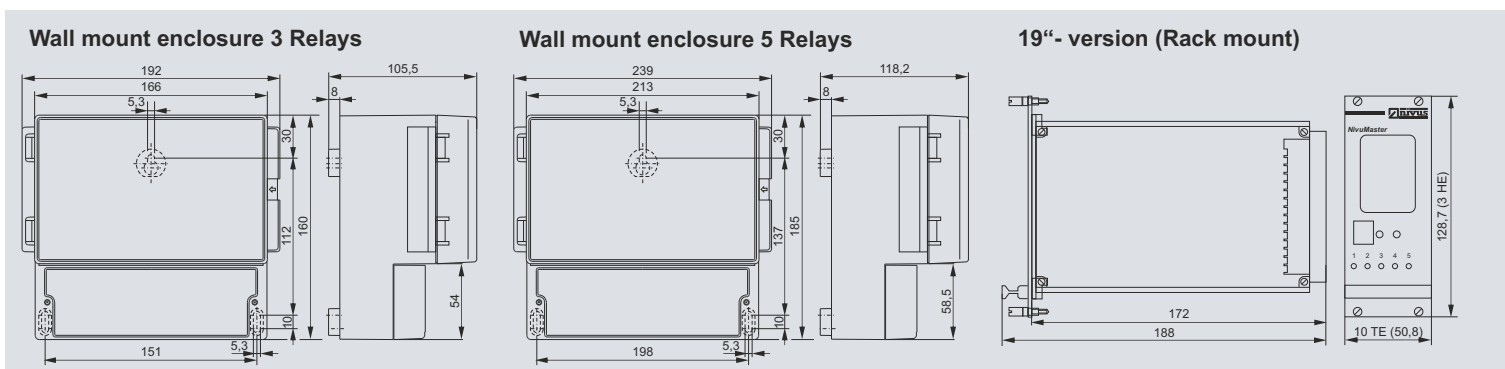
Non-Contact Ultrasonic Level Measurement

The sensor continuously transmits ultrasonic impulses which are reflected from the surface of the liquid. The reflected waves are detected by the sensor again. Level, distance or volume are calculated depending on the sound transit time.

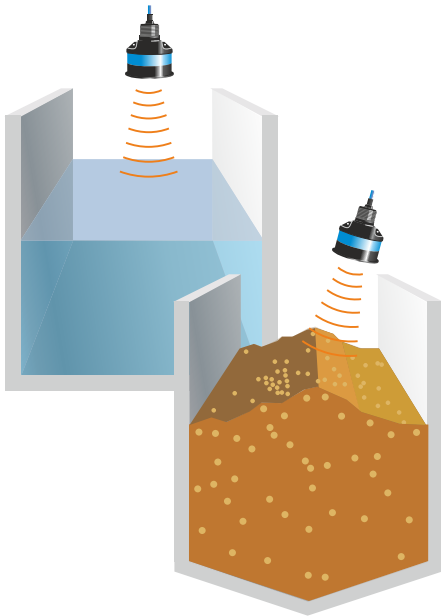
The NivuMaster Transmitters: always the right solution

	NivuMaster L-2	NivuMaster 3 Relays	NivuMaster 5 Relays	NivuMaster LD-5:2
Level measurement/ distance measurement 	++ / +	++	++	++
Volumetric measurement/ empty space measurement 	++ / +	++	++	++
Pump control/ slide valve control 	-	+	++	+
Volume measurement 	-	++	++	+
Comparative measurement 	-	-	+	++
Measurement on stormwater overflow tanks 	-	++	++	+
Operation				
Display	optional	+	+	+
Keys	optional	+	+	+
Inputs				
Sensors / optional 4-20 mA / digital	1 / - / -	1 / - / -	2 / optional 4-20 mA / -	2 / - / -
Outputs				
Relays / mA-output	2 / 1	3 / 1	5 / 1	5 / 2
RS232 interface	1	1	1	1
Construction				
Wall mount IP65 / DIN rail mounting	IP66/ -	+ / +	+ / +	+ / +
19" version (rack mount)	-	+	+	+
Panel mount	-	+	+	+
Ex approval according to ATEX	Zone 0, 1 and 2	Zone 0, 1 and 2	Zone 0, 1 and 2	Zone 0, 1 and 2
	Compact standard model with 2 relays for measurement of level and volume.	For measurement of distance, level and volumes as well as for pump control and extended control tasks.	Extended NivuMaster 3 Relays model with additional control options.	Model for 2 sensors, particularly designed for comparative screen measurements. For measurement and output of difference and level.

Dimensions

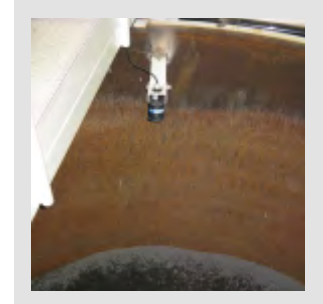


NivuMaster: Versatility is its strength



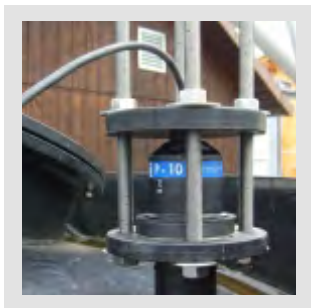
Level measurements

Contactless, maintenance-free level control and measurement in liquids and solids play an important role in the industrial and municipal areas. The high precision and operational safety is of importance in fulfilling these standards. The NivuMaster is an efficient measurement device that meets all these modern requirements for accurate measurements.



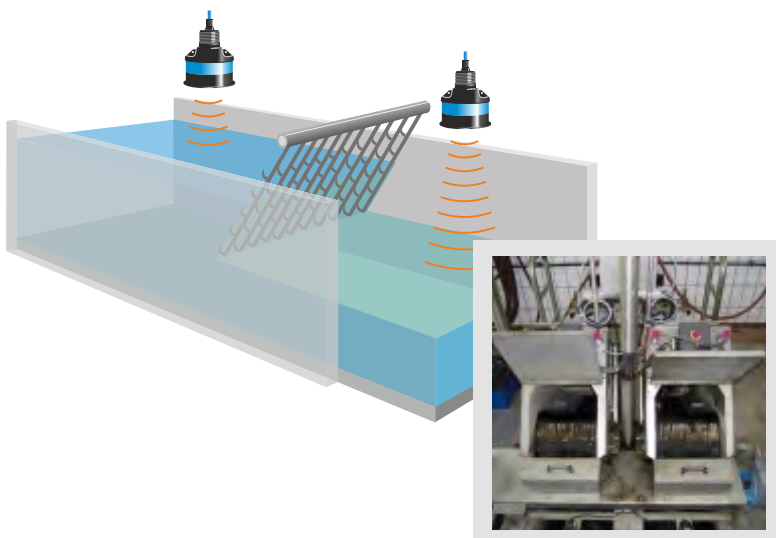
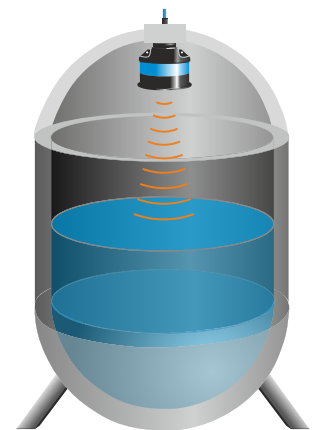
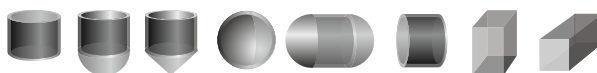
Distance measurements

The NivuMaster measures the distance from the contactless sensor to the object. The performance and capability of the NivuMaster is diverse. Its versatility allows for various applications from loop regulation, roll thickness and water level measurements over time, positions, grates and crushers to determination of filter cake thickness, activated sludge blankets and mine tailings.



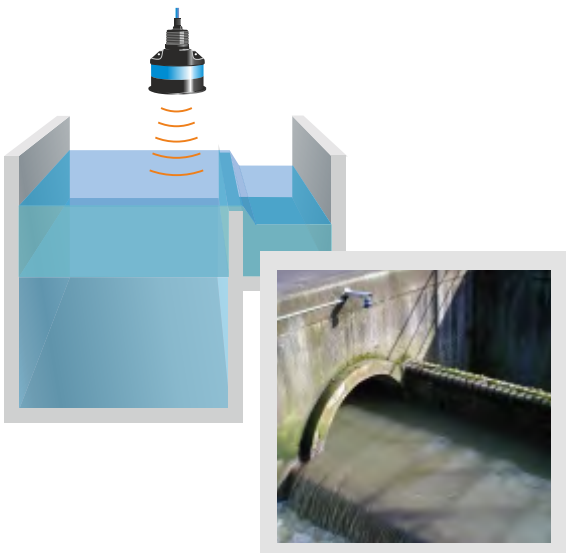
Volumetric measurements

No matter what container size or shape, the NivuMaster can convert the level measurement into volume with the ability to store standard pre-programmed vessel shapes. Also, a non-standard shape can be freely programmed with custom linearisation capability in the NivuMaster.



Comparative measurements

Differential measurements of water levels at the high and low levels at WWTP gates and screens using 2 ultrasonic sensors can be accomplished with the NivuMaster LD-5:2. All standards of differential measurements are possible with the NivuMaster. The NivuMaster combines all standards required to meet the requirements of modern comparative measurement.

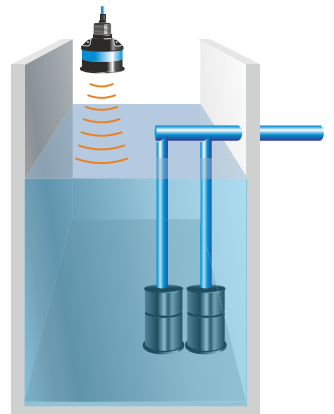


Overflow measurement

No matter if basin fill level, overfall volume or trend – the NivuMaster can do it all. Specially designed for storm control applications, the NivuMaster LF-5:2 is available. One sensor measures height and volume. With the trend monitoring capability, the stormbasin/ overflow chamber can be efficiently controlled and performance optimized.

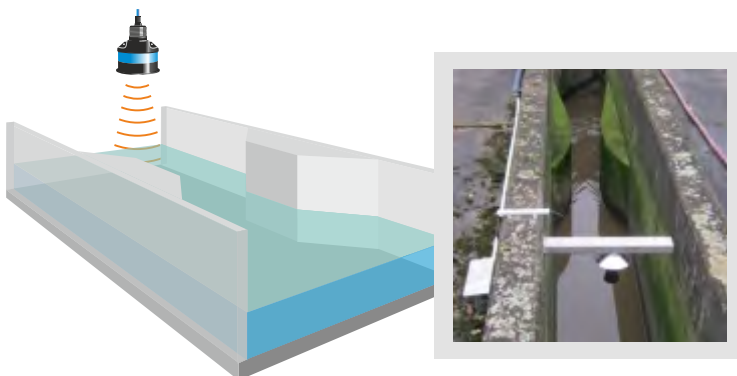
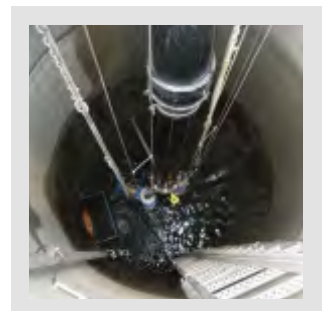
Pump control

Comprehensive pump control of up to 6 pumps with special features as standard is possible with the NivuMaster pump manager. Two groups of pumps can be chosen. What previously was possible only by using additional devices can now be easily handled by the NivuMaster. Due to a runtime-based control it is possible to equally share the operation times of pumps as well as to optimize maintenance intervals. Even “grease rims” are no problem for the NivuMaster.



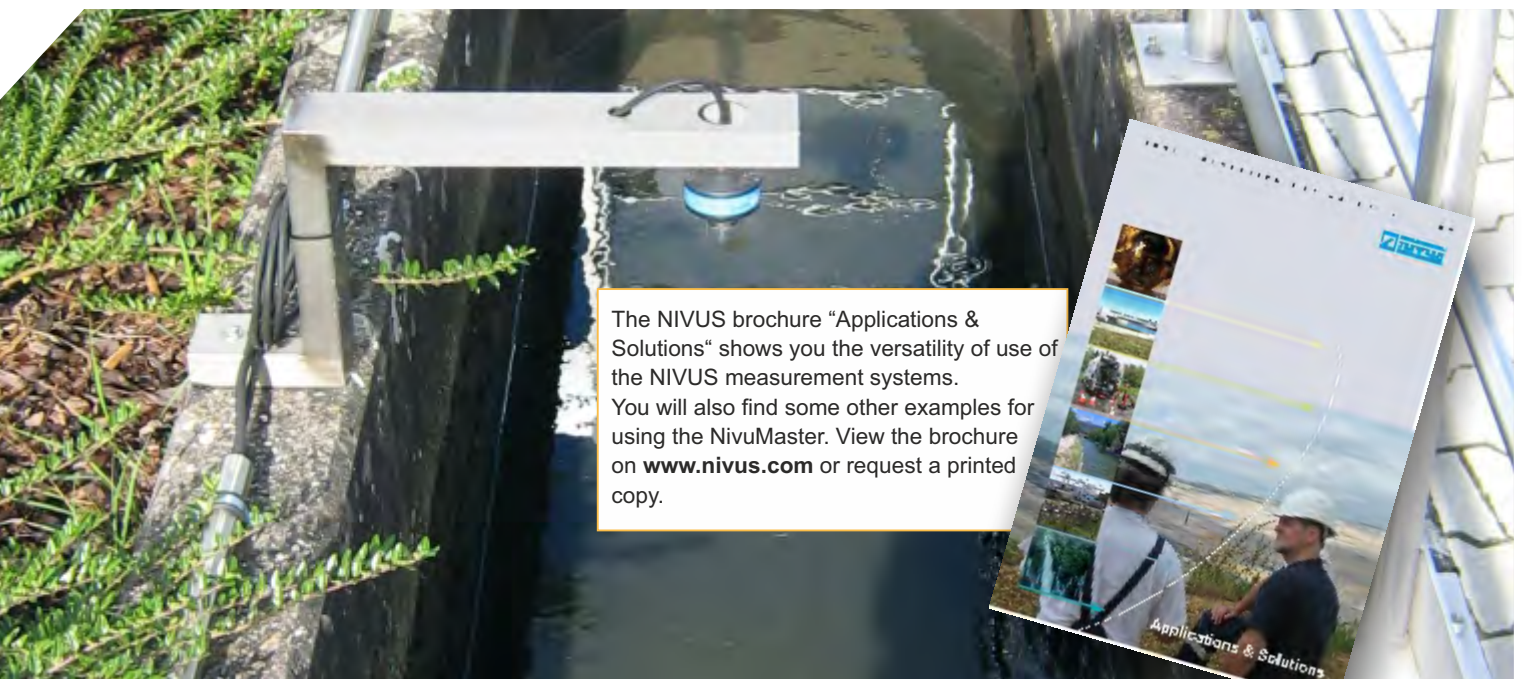
By programming pump switching points as area, the development of deposits on vessel walls is reduced strongly.

All the pump cycles can be programmed individually, no matter what type of pump exchanges exist.



Volume measurement

The NivuMaster measures flow in channels and overflow structures with highest precision. The most common standard channels and weir forms are integrated into the device and can be easily programmed. Furthermore, a linearisation curve can be set up easily. The graphic display shows the flow readings in the desired units.



The NIVUS brochure “Applications & Solutions” shows you the versatility of use of the NIVUS measurement systems. You will also find some other examples for using the NivuMaster. View the brochure on www.nivus.com or request a printed copy.

NIVUS GmbH

Im Taele 2
75031 Eppingen, Germany
Phone: +49 (0)7262 9191-0
Fax: +49 (0)7262 9191-999
info@nivus.com
www.nivus.com

NIVUS AG

Burgstrasse 28
8750 Glarus, Switzerland
Phone: +41 (0)55 6452066
Fax: +41 (0)55 6452014
swiss@nivus.com
www.nivus.com

NIVUS Austria

Mühlbergstraße 33B
3382 Loosdorf, Austria
Phone: +43 (0)2754 567 63 21
Fax: +43 (0)2754 567 63 20
austria@nivus.com
www.nivus.com

NIVUS Sp. z o.o.

ul. Hutnicza 3 / B-18
81-212 Gdynia, Poland
Phone: +48 (0)58 7602015
Fax: +48 (0)58 7602014
poland@nivus.com
www.nivus.pl

NIVUS France

14, rue de la Paix
67770 Sessenheim, France
Phone: +33 (0)3 88071696
Fax: +33 (0)3 88071697
france@nivus.com
www.nivus.fr

NIVUS Ltd.

Head office UK:
Wedgewood Rugby Road
Weston under Wetherley
Royal Leamington Spa
CV33 9BW, Warwickshire, UK
Phone: +44(0)7834658512
david.miles@nivus.com
Sales office:
Southampton, Hampshire, SO30 2RD
Phone: +44(0)770375 3411
andy.kenworthy@nivus.com
www.nivus.com

NIVUS Middle East (FZE)

Building Q 1-1, ap. 055
P.O. Box: 9217
Sharjah Airport International
Free Zone
Phone: +971 6 55 78 224
Fax: +971 6 55 78 225
middle-east@nivus.com
www.nivus.com

NIVUS Korea Co. Ltd.

#2502, M Dong, Technopark IT Center
32 Song-do-gwa-hak-ro, Yeon-su-gu,
INCHEON, Korea 21984
Phone: +82 32 209 8588
Fax: +82 32 209 8590
korea@nivus.com
www.nivus.com

NIVUS Vietnam

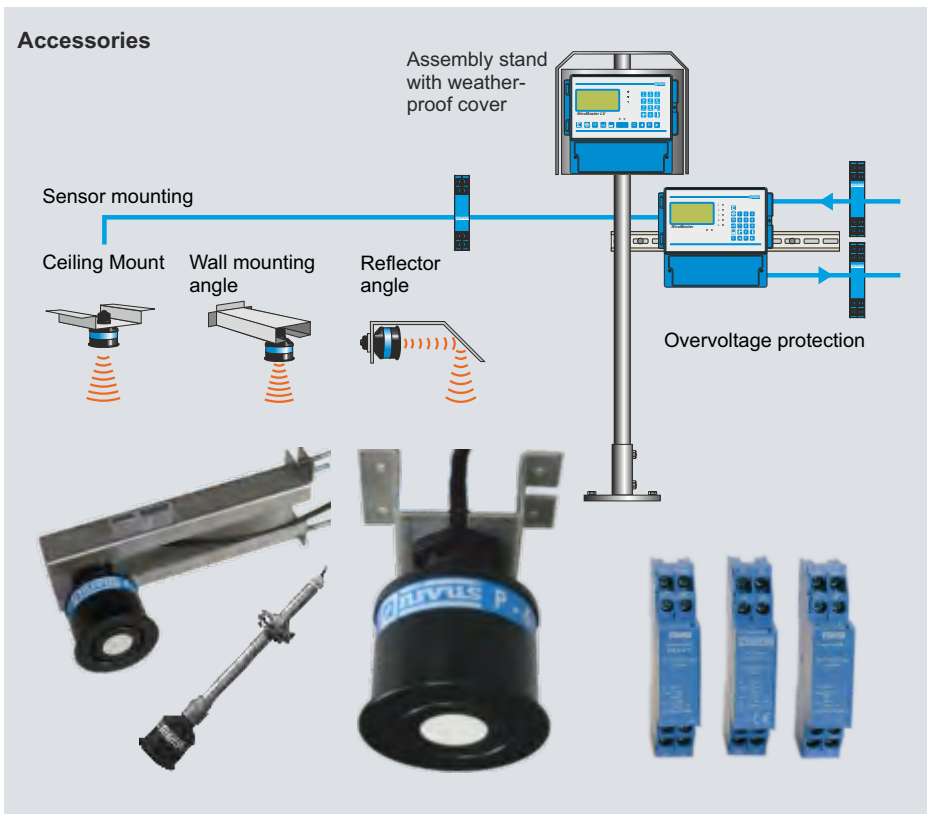
21 Pho Duc Chinh, Ba Dinh,
Hanoi, Vietnam
Phone: +84 12 0446 7724
vietnam@nivus.com
www.nivus.com

Accessories Ultrasonic Sensors

The mounting accessories allow quick and easy installation of ultrasonic level sensors.

- Easy installation of level sensors
- Robust construction made of stainless steel
- Includes all fastening materials

The robust, high-quality accessories are made of stainless steel (1.4571) and are suitable for indoor and outdoor installation. All accessories are shipped completely including the required fastening materials which enables easy installation of sensors on ceiling or wall.



You can find more accessories and more information in the according manuals or on www.nivus.com