

**Wolf Process Automation Limited** 

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LEVEL. UP TO THE MAX

APPROVED QUALITY

LEVEL MEASUREMENT AT THE HIGHEST LEVEL



### LEVEL. UP TO THE MAX.

UWT GmbH in Betzigau is the expert in level measurement technology and a reliable, world leading solution provider for the safe and accurate detection of levels and limit levels in silos and material processing across a wide variety of industries. Whether for bulk goods, liquids, pastes or foams - UWT, with product lines such as Rotonivo®, Vibranivo® and NivoBob®, is synonymous with the perfect measurement technology solution for almost every application.

With production sites in Betzigau and in Malta, as well as further locations in the USA, Great Britain, Spain, Poland, China, India, Brazil and Mexico, several million applications have now been put into practice worldwide. UWT stands for level measurement technology at the highest global standards. The whole enterprise is based on the three strong pillars of technology, performance and partnership together with collaboration at eye level - with customers, suppliers, partners and close to 200 employees. We have carved out an outstanding and strategic position in the market within the area of limit levels for bulk solids, and set new standards with the rotary paddle switch. In addition, we offer end-to-end digitisation: from the latest E-tools, which enable quick

and easy product selection, configuration and commissioning, through easy and intuitive operation to innovative device communication, all of which ensure smooth operation. The high quality and reliability of the UWT products, the robust design, the easy handling and the longevity of the sensors ensure low down-times, high levels of system availability and thus a high degree of operational security. All made in Germany. The range of products and services has been continuously developed and now also includes monitoring and visualisation systems as well as complete system configuration. Further proof of how unswervingly UWT GmbH is geared towards growth.

As an owner-managed, German, mediumsized company, UWT is ideally positioned
with an international sales network in over
90 countries with personal contacts on
site, available locally. Open and honest
communication with customers and partners
alike characterise UWT together with its loyal
and satisfied employees. The notable great
team spirit ensures that UWT feels like one
big family – and that's what counts.

### MISSION STATEMENT

Social commitment and social responsibility are essential components of the corporate philosophy at UWT. The focus is on sport, culture and social issues. Environmental protection and responsibility for the future are also very important at UWT. The provision of e-charging stations, durable, resource-

saving products and the use of green electricity underlines this. So it's no wonder that UWT is one of "Germany's Best Employers", is a "Great Place to Work®" and is one of the winning companies in "Best Employers in the Allgäu".



# **OUR CLIENTS**



### **QUALITY CERTIFICATES**





### **APPROVALS WORLDWIDE**





























# THE LEVEL COMPANY

GLASS ENVIRONMENT & RECYCLING

PHARMA WATER / WASTEWATER

CHEMICALS PETROCHEMICALS

OTHERS WOOD

SYNTHETICS ANIMAL FEED

BUILDING / CEMENT FOOD

RUBBER MINING / METAL



### SOLIDS

UWT is a recognised expert for level measurement of any bulk material in a wide variety of industries and offers solutions across a vast range of applications, including specialist solutions.



### **LIQUIDS**

UWT offers a wide range of products for liquids with highly reliable solutions for level and point level measurement.





### **WEBSHOP**

# PRODUCT INFORMATION | PRODUCT FINDER & COMPARISON PRODUCT CONFIGURATOR | CASE STUDIES | APPLICATION DATABASE

To access important and latest product information such as technical specifications, international approvals, document downloads and spare parts lists, simply use the website's search facility.

Use our product finder to search for the perfect sensor for your application. Compare products and even configure the devices according to your own requirements, from anywhere and at any time.

Should you require assistance in any way, then our expert UWT sales and service team is here, ready to support you.



### 24/7 ONLINE WEBSHOP

Product Information & Downloads available around the clock.



### PRODUCT CONFIGURATION

Configure products with just a few clicks. Save, edit & share your configurations.



### **FAST TRACK PRODUCT FINDER**

Step-by-step to the right sensor for your application.



### **PRICE INFORMATION**

Prices are shown according to user role or you can request a quote.



### PRODUCT COMPARISON

Compare the main features of your chosen products.



### **FAVOURITES LIST**

Save your favourites and create individual lists with your configurations.



### **CASE STUDIES**

From a variety of applications and industries.



### **APPLICATION DATABASE**

Search for specific examples of level measurement installations from around the world.



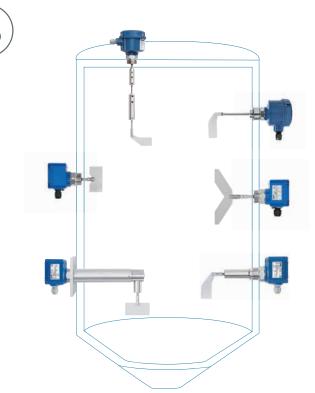


### Rotonivo®

# ROTARY PADDLE LEVEL SWITCH FOR SOLIDS

A motor driven shaft causes a vane to rotate. Once the material level reaches the vane, thereby preventing further rotation, switches are activated which result in an output signal and the motor stops. When the vane is free again from material, the output signal is reset and the motor driven shaft rotates again.







### **SPECIAL FEATURES:**

- Universal voltage electronics
- Adjustable sensitivity (≥ 15 g/l)
- · Rotation principle unaffected by caking
- · Robust aluminum die-cast housing
- Protected motor (friction clutch, double bearing)
- Tube and metal rope extension
- Different rotary paddles for special solutions
- Temperature range -40 °C to +1,100 °C
- High quality grade stainless steel (process)
- RN 6000 is world's first rotating level limit switch compliant to SIL 2

- Strong caking
- Dusty environments
- Abrasive materials
- Over pressure and low pressure environments
- · Heavy mechanical loading
- Electrostatic charging
- Variable parameters
- Explosive environments
- Hygienic applications / EHEDG

### Rotonivo®

# ROTARY PADDLE LEVEL SWITCH FOR SOLIDS

A motor driven shaft causes a vane to rotate. Once the material level reaches the vane, thereby preventing further rotation, switches are activated which result in an output signal and the motor stops. When the vane is free again from material, the output signal is reset and the motor driven shaft rotates again.





### **SPECIAL FEATURES:**

- Cost-effective design
- Universal voltage electronics (without microswitch)
- Adjustable sensitivity (≥ 35 g/l)
- · Rotation principle unaffected by caking
- Plastic housing with dust-Ex approval
- Protected motor (friction clutch, double bearing)
- Version with pendulum shaft or cable extension

- Strong caking
- Dusty environments
- Over pressure and low pressure environments
- · Heavy mechanical loading
- Explosive environments
- Variable parameters

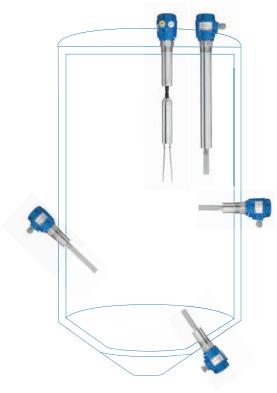


### Vibranivo®

# VIBRATING FORK LEVEL SWITCH FOR SOLIDS & SEDIMENTS IN LIQUIDS

Electronically stimulated piezos cause the fork to vibrate. As soon as the sensor is covered with material, the vibration is dampened and the resulting electrical current change causes the output signal to switch. Once the material level falls below the sensor it is free to vibrate again and the output signal is reset.







### **SPECIAL FEATURES:**

- 2-wire technology
- Very high sensitivity (< 5 g/l Vibrasil®)
- Surface roughness 0.75 μm
- High quality material (SS 316L)
- Suitable for overpressure up to 16 bar
- Temperature range -40 °C to +150 °C
- Extremely robust version
- PFA coating
- NAMUR Standard
- Universal voltage electronics

- Extremely light product density
- Pneumatic filling
- Applications with process overpressure
- Limited space
- · Vibration within the vessel
- High reliability requirements
- High hygienic requirements
- Sediment levels in liquids

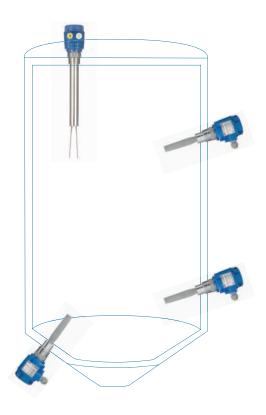


### Vibranivo®



# VIBRATING FORK LEVEL SWITCH FOR SOLIDS

The vibrating fork is set into vibration by piezo elements. The vibration is stopped by the surrounding bulk material. The resulting change in voltage within the piezo elements is electronically detected, triggering a switch output.





### **SPECIAL FEATURES:**

- Cost-effective design
- Very high sensitivity (> 30 g/l)
- · High-quality process materials
- Suitable for overpressure up to 16 bar
- Temperature range -40 °C to +150 °C
- Extremely robust version
- Universal voltage electronics

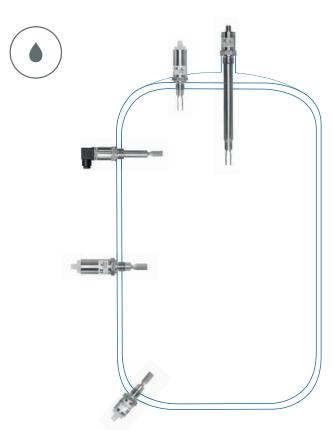
- Pneumatic filling
- Applications with process overpressure
- Limited space
- · Vibration within the vessel
- High reliability requirements



### Vibranivo®

# VIBRATING FORK LEVEL SWITCH FOR LIQUIDS

The vibrating fork is set into vibration at its resonant frequency by piezo elements. When the fork tines come into contact with liquids, the frequency changes. This frequency change is electronically detected, and a switch output is activated.















### **SPECIAL FEATURES:**

- Insensitive to material build-up, flows, turbulence and air bubbles
- Ultra-compact design with ½" process connection
- Uniquely bright signal LED, selectable colours
- IO-Link communication
- Hygienic design, hygienic adapter
- CIP / SIP compatible
- Pipe extension up to 4 m
- Complete stainless steel design (IP 69K / Type 6P)
- Potted electronics

- Limited space
- Hygienic applications
- High-viscosity liquids
- Agitator tank
- Pressure vessel
- · Leakage monitoring
- Fast commissioning without material synchronisation

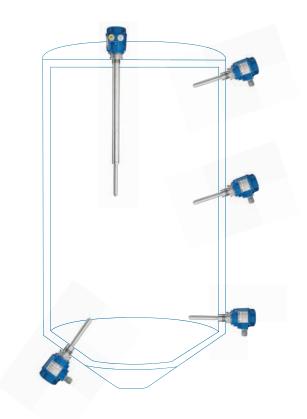


### Mononivo<sup>®</sup>



# VIBRATING ROD LEVEL SWITCH FOR SOLIDS

Electronically stimulated piezos cause the single rod probe to vibrate. When the material covers the sensor, this causes the vibration to stop and a voltage change is caused within the piezo elements. This is electronically registered and causes the output signal to switch.





### **SPECIAL FEATURES:**

- Compact limit switch with threads from 1"
- Sensitivity adjustable in 4 settings
- High surface quality
- High quality material (SS 316L)
- · Heavy mechanical loading
- Robust version for overpressure up to 16 bar
- Temperature range -40 °C to +150 °C
- · Backflow detection in pipes and shafts

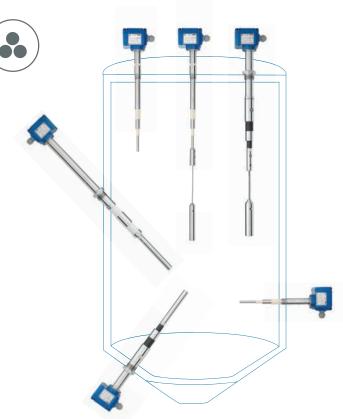


- Light products from 20 g/l
- Powdery material with strong caking properties
- Coarse-grained granulate
- Process overpressure
- · Limited space
- Vibration within the vessel
- High safety standard
- High hygienic requirements
- Explosive environments

### **RFnivo®**

# CAPACITANCE LEVEL SWITCH FOR SOLIDS

The capacitive level limit switch is automatically calibrated to a reference capacitance of an empty vessel. If the probe is covered by the product, the measured capacitance changes through the dielectric and a switching signal is activated. The integrated "Active Shield" technology ensures high reliability even for products that cause caking.





### **SPECIAL FEATURES:**

- Very high sensitivity (DK ≥ 1.5 )
- High mechanical load
- High quality process materials (SS 316L, ceramics, PPS)
- Robust version for overpressure up to 25 bar
- Temperature range -40 °C up to + 500 °C
- RF 3100 PROTECTION PLUS version with anti-corrosive PFA coating

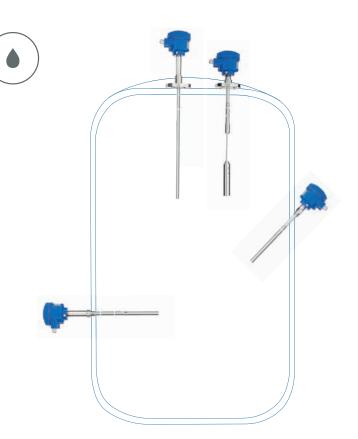
- · Heavy materials
- Dusty environments
- · Abrasive and aggressive media
- Positive and negative pressure
- Caking material
- · Vibration in the vessel
- Hazardous areas
- EHEDG applications



### **RFnivo®**

# CAPACITANCE LEVEL SWITCH FOR LIQUIDS & INTERFACE

The capacitive measuring limit switch responds to the change in capacitance at the probe, which is detected by the change in the oscillating frequency. The integrated "Active Shield" technology ensures high reliability even for products that cause caking.







### SPECIAL FEATURES:

- Functionality independent of silo wall
- Temperature range -40 °C up to + 400 °C
- Robust version for overpressure up to 35 bar
- Digital electronics with Profibus PA, integrated display and operating menu (optional)
- Potted electronics
- Very high sensitivity (DK ≥ 1.5)
- Rod and metal rope extension (up to 25 m)
- WHG certification
- · Certification accord. Lloyd's Register

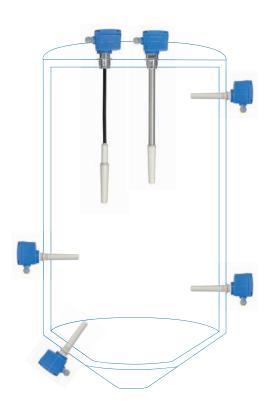
- All types of liquids
- Applications with condensation
- Very strong caking
- Aggressive materials
- Vibrations within the process
- · High safety standard
- Explosive environments
- Interface measurement

# Capanivo®



# CAPACITANCE LEVEL SWITCH FOR SOLIDS

The electrodes in the sensor form a capacitor. When the sensor is touched by the product, the capacitance changes, and the electronics convert this into a switching signal. The integrated "Active Shield" technology allows this system to be used in particularly adhesive materials.





### **SPECIAL FEATURES:**

- Suitable for use in non-metallic containers
- Very high sensitivity (DK ≥ 1.6)
- Functionality independent of silo wall
- Versatile supply voltages
- Adjustable switching delay
- Tube and cable extension
- Overpressure up to 25 bar
- Temperature range -40 °C to +180 °C
- Food compliant version

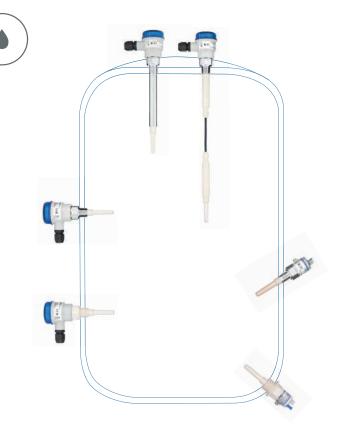
- Light materials
- Dusty environments
- Pneumatic filling
- Very strong caking
- Aggressive material
- · High safety standard
- Explosive environments



# Capanivo®

# CAPACITANCE LEVEL SWITCH FOR LIQUIDS & INTERFACE

The electrodes in the sensor form a capacitor. If the product comes into contact with the sensor, the capacitance changes and the electronics converts it into a switching signal. Available as version with stainless steel or synthetic housing. The integrated "Tip Sensitivity" and "Active Shield" technology guarantee a high level of functional reliability even for products that cause caking.





### **SPECIAL FEATURES:**

- Available with two different housing sizes
- Compact limit switch from 1/2" connection thread
- Installation in all tank types and shapes
- For use in metallic and non-metallic containers
- Very high sensitivity (DK ≥ 1.5)
- Temperature range -40 °C up to +125 °C (CIP suitable up to 150 °C)
- IO-Link with PNP, NPN, push pull signal output
- 8/16 mA or 4...20 mA continuous current output
- WHG and VLAREM certification

- All types of liquids
- Strong caking
- · Limited space
- Aggressive materials
- · High safety standard
- High hygiene requirements
- Explosive environments
- Leakage detection
- Interface measurement

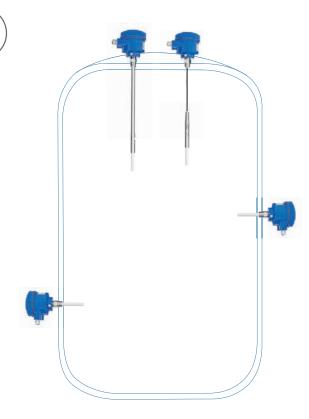


# Capanivo®

# CAPACITANCE LEVEL SWITCH FOR LIQUIDS & INTERFACE

The electrodes in the sensor form a capacitor. If the product comes into contact with the sensor, the capacitance changes and the electronics converts it into a switching signal. The integrated "Tip Sensitivity" technology guarantees a high level of functional reliability even for products that cause caking.







### **SPECIAL FEATURES:**

- For use in metallic and non-metallic containers
- Very high sensitivity (DK ≥ 1.5)
- Potted electronics
- Digital electronics with Profibus PA, integrated display and operating menu (optional)
- Robust version for overpressure up to 25 bar
- Temperature range -40 °C up to +125 °C
- WHG certification
- Certification accord. Lloyd's Register
- SensGuard cover (optional)

- All types of liquids
- Measurement range of up to 30 m
- Strong caking
- Vibrations within the process
- · Aggressive materials
- · High safety standard
- Explosive environments
- · Leakage detection
- Interface measurement

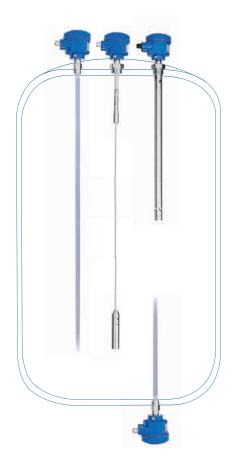


# NivoCapa®



# CAPACITANCE LEVEL TRANSMITTER FOR LIQUIDS & INTERFACE

The sensor measures the electrical capacitance of the product, which is proportional to the fill level in the container. The integrated "Active Shield" technology allows this system to be used in particularly adhesive materials.





### **SPECIAL FEATURES:**

- For use in metallic and non-metallic containers
- 2-wire technology (output signal 4...20 mA according to NAMUR NE 43)
- Very high sensitivity (DK ≥ 1.5)
- Rod and metal rope extension (up to 25 m)
- · Robust version for overpressure up to 35 bar
- Temperature range -40 °C up to +200 °C
- Quick response time
- PFA coating
- Programmable electronics with buttons
- Certification accord. Lloyd's Register

- All types of liquids
- Condensation
- · Very strong caking
- Aggressive materials
- · High safety standard
- Explosive environments



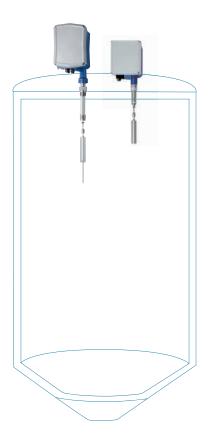
### NivoBob®





### ELECTROMECHANICAL PLUMB BOB FOR SOLIDS & LIQUIDS & SEDIMENTS IN LIQUIDS

A sensor weight attached to either a metal tape or rope is electromechanically lowered into the vessel. Once the sensor weight rests on the material, the winding direction of the motor changes and the sensor weight is rewound to the upper stop position. As the weight is lowered, the distance is electronically measured. Microprocessors convert the measured distance together with the programmed silo geometry into a volumetric output signal. This signal is updated each time the sensor weight is lowered.





### **SPECIAL FEATURES:**

- High sensitivity (≥ 20 g/l)
- · Various sensor weights
- Rope and tape version
- Overpressure version up to 1.7 bar
- Temperature range -40 °C to +250 °C
- Service life up to 500,000 cycles of tape version
- Integrated tape cleaner
- Diagnostics function
- Comm. via Modbus RTU or Profibus DP

- · Strong caking
- Material with changing temperature / humidity
- Measurement range of up to 50 m
- Electrostatic charging
- · Heavy and very light materials
- · Limited space
- Low dielectric constant
- Dusty environments

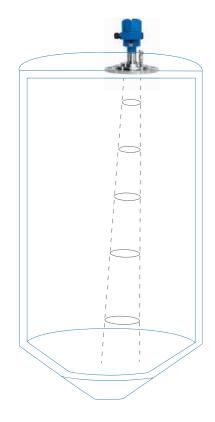






# RADAR SENSOR FOR SOLIDS

A high-frequency 80 GHz signal is transmitted with a very narrow beam angle. The signal is reflected by the bulk material and received back to the sensor. The frequency difference, which is directly proportional to the distance, is then further processed and output as the level signal. The narrow beam angle makes the use in narrow, tall silos possible and facilitates the installation and alignment of the sensor.





NR 3100 Plastic horn antenna



NR 3200 Threaded



NR 3300 Lens antenna



NR 3300 High-temperature standpipe



UWT LevelApp



Google Play



App Store

### **SPECIAL FEATURES:**

- Very high sensitivity
- 80 GHz technology
- 3° narrow beam angle
- Flush-mounted lens antenna
- Integrated lens cleaner
- Adjustable flange design up to max. 10°
- Temperature solutions -55 °C up to +250 °C
- Process temperature up to 1,200 °C with standpipe
- Compact version with 1 ½" threaded connection
- Quick Start Wizard
- Configuration via UWT LevelApp
- Various electronics versions: 4...20 mA, HART, Modbus

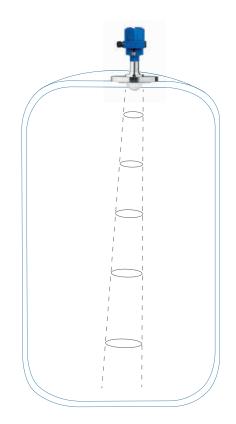
- Very light bulk materials
- Dusty environment
- Use within tall, narrow silos up to 120 m
- Optimum reflections of bulk material with material cone
- Aggressive material
- · Perfect positioning
- Explosive environments





# RADAR SENSOR FOR LIQUIDS

A high-frequency 80 GHz signal is transmitted with a very narrow beam angle. The signal is reflected by the medium and received back to the sensor. The frequency difference, which is directly proportional to the distance, is then further processed and output as a level signal. The sensor is ideal for use in process tanks and is also suitable for acids and alkalis. Measurement through the top of plastic tanks is possible without any problems.









NR 8200 Threaded antenna



NR 8300 PTFEencapsulated antenna



NR 8400 Hygienic antenna



NR 8500 High-temperature version



### **SPECIAL FEATURES:**

- Very compact with a ¾" process connection
- PTFE-encapsulated version
- Measurement up to the antenna tip (minimal blocking distance)
- · Very high sensitivity
- 80 GHz technology
- 3° narrow beam angle
- Potted electronics, Protection class IP66 / IP68, Type 6P
- Temperature solutions -196 °C to +450 °C
- Quick Start Wizard, Configuration via UWT LevelApp
- Pressure-resistant design (Ex d)
- CIP / SIP compatible

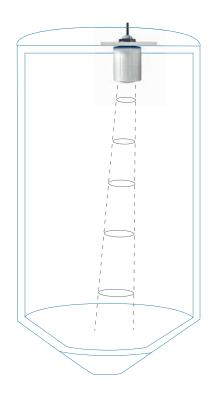
- Liquids of all kinds
- Very strong caking
- Steam, outgassing and condensation
- Optimal reflection of moving surfaces
- · Aggressive materials
- Potentially explosive areas
- Individual positioning of the sensor





# RADAR SENSOR FOR SOLIDS

A high frequency signal is transmitted with a very narrow beam angle. The signal is reflected by the bulk material and received back to the sensor. The frequency difference, which is directly proportional to the distance, is then further processed and output as the level signal. Thanks to the high degree of protection for bulk solids applications, the sensor is ideal across all industries. Installation is also possible outdoors on free-standing stockpiles.



NR 4100 Mounting thread Measuring range up to 30 m







UWT LevelApp Wireless sensor setting







App Store

### **SPECIAL FEATURES:**

- Very compact with 1" connection thread (PVDF)
- Measurement up to the antenna tip (minimal blocking distance)
- High sensitivity (DK value ≥ 1.1)
- 80 GHz technology
- 4° narrow beam angle
- Potted PVDF housing, ingress protection IP66/ IP68
- Temperature range -40 °C to +80 °C
- Quick-Start Wizard
- Configuration via UWT LevelApp
- WHG certification

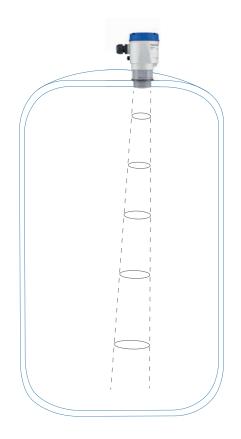
- · Lightest and heavy bulk goods
- Dusty environments
- · Condensation and strong caking
- Narrow, medium-sized silos up to 30 m
- Optimum reflections of bulk material with material cone
- · Aggressive materials
- Potentially explosive areas
- Individual positioning of the sensor





# RADAR SENSOR FOR LIQUIDS

A high frequency signal is transmitted with a very narrow beam angle. The signal is reflected by the medium and received back to the sensor. The frequency difference, which is directly proportional to the distance, is then further processed and output as the level signal. The sensor is ideal for use in water treatment tanks and, due to its design, is also suitable for acids and alkalis. It is possible for measurement to be made through the tank top of plastic containers.



NR 7100 Without Display Measuring range up to 10 m



NR 7200 With Display Measuring range up to 20 m



NR 7200 Plug on Display



UWT LevelApp Wireless sensor setting







App Store

### **SPECIAL FEATURES:**

- Very compact with 1 ½" connection thread (PVDF)
- Measurement up to the antenna tip (no blocking distance)
- High sensitivity (DK value ≥ 1.1)
- 80 GHz technology
- 8° narrow beam angle
- Potted electronics, ingress protection IP66/IP67
- Temperature range -40 °C to +80 °C
- Quick-Start Wizard
- Configuration via UWT LevelApp
- WHG certification

- Highly viscous liquids
- · Very strong caking
- Steam, outgassing and condensation
- Optimal reflection of moving surfaces
- Aggressive materials
- Potentially explosive areas
- Individual positioning of the sensor



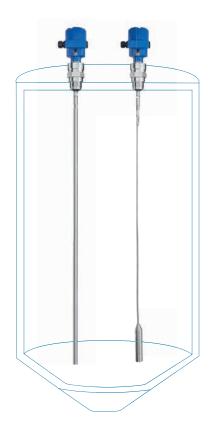
### NivoGuide®



# TDR GUIDED WAVE RADAR SENSOR FOR SOLIDS

High-frequency microwave pulses are coupled to a cable or rod and guided along the probe. The emitted pulse is reflected by the product surface. The time difference between the transmitted and reflected pulse is converted to a level.





NG 3100 Rod





Programming module



Lid with viewing window



Pluggable display and adjustment module

UWT LevelApp



Google Play



App Store

### **SPECIAL FEATURES:**

- Adjustable probes (up to 75 m)
- Very high sensitivity (DK ≥ 1.5)
- PA-coated rope probe
- Temperature range 40 °C up to +200 °C
- Pressure-resistant versions up to 40 bar
- Robust design
- Various electronics versions
   (4...20 mA / HART, Modbus)
- Configuration via UWT LevelApp

- Bulk materials with strong withdrawal forces
- Strong caking
- Abrasive materials
- Dusty environment
- Explosive environments



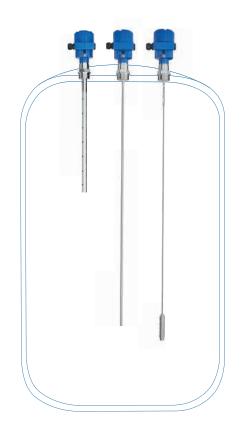
### NivoGuide®



# TDR GUIDED WAVE RADAR SENSOR FOR LIQUIDS & INTERFACE

High-frequency microwave pulses are coupled to a cable or rod and guided along the probe. The emitted pulse is reflected by the product surface. The time difference between the transmitted and reflected pulse is converted to a level.







### **SPECIAL FEATURES:**

- Adjustable probes (up to 75 m)
- Very high sensitivity (DK ≥ 1.4)
- Temperature solutions -196 °C to +450 °C
- For extremely high pressure up to 400 bar
- Second line of defense (optional)
- · Minimal blocking distance
- Boiler approval
- Various electronics versions
   (4...20 mA / HART, Modbus)
- Additional power supply
- Configuration via UWT LevelApp

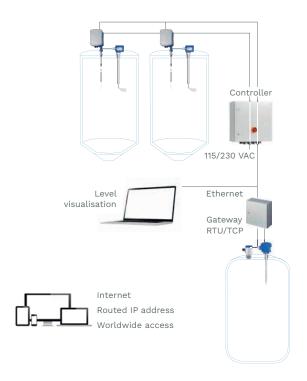
- · Liquids with moving surface
- Strong caking
- Small containers with fixtures
- Condensation and foam generation, steam
- High hygiene requirements
- Explosive environments
- Interface measurement



### NivoTec®

# LEVEL MONITORING AND VISUALISATION

Various technologies are available for level indication, which can be configured project-specifically. Simple LED digital displays for the evaluation of a 4...20 mA signal for installation in control cabinets or for wall mounting as well as touch panels and web server modules with visualisation software. The web server solutions meet all the requirements of modern level monitoring.



NT 3500 Level visualisation from a PC via webserver



NT 4500 Standardised level visualisation



NT 4600 Level visualisation via 7" touch panel



NT 4700 Level indicator with digital display



NT 4900 Level indicator with digital display



NT 9000 Local fill level display with LC-Display



### **SPECIAL FEATURES:**

- Autonomous system without expensive licenses
- · Access via standard browser software
- Transmits levels into the Ethernet, make them transparent and evaluable
- Evaluation of level signal via Modbus RTU, ethernet TCP, 4...20mA any sensor technology or counting pulse
- · Worldwide access via remote data query
- Data storage and download with trend query via software
- Individually configurable

- Complete systems for optimized silo/tank management
- Reasonably priced compact systems
- Monitoring up to 50 containers
- Display of levels in weight, height, percent, volume, etc. (programmable)





### **NivoLED®**

### SIGNAL LAMP FOR HAZARDOUS AREAS

A control light designed for use in explosive environments, featuring two-colour switching and 360° visibility. Its high brightness is visible even from a great distance, ensuring comprehensive safety.

NL 9000 LED Signal lamp



### **SPECIAL FEATURES:**

- M20 x 1.5 or NPT ½" connection thread
- Two-colour shifting (red, green)
- 360° visibility
- High brightness
- · Long service life
- · Low power consumption
- Various connection voltages
- Housing material PVDF
- Ambient temperature -40 °C to +60 °C
- Protection class IP 66, NEMA Type 4X
- Approvals for ATEX, IEC-Ex, cFMus

- Gas and dust explosion hazardous areas
- Attachment to level measuring devices, control cabinets, and process systems





# **UWT SENSORS FOR DEMANDING MEASUREMENT TASKS**

Benefit from our experience and you will find a suitable product for all types of application

	NivoGuide® NG 3	Guided Radar (TDR)	>	1	•	•	DK ≥ 1.5	-40200 °C	40 bar	•	•	•	1	>	>	316L/PEEK
JREMENT	NivoRadar <sup>®</sup> NR 4	Radar	>	1	•	>	DK ≥ 1.1	-4080 °C	3 bar	>	>	>	1	1	>	PVDF
CONTINUOUS MEASUREMENT	NivoRadar <sup>®</sup> NR 3	Radar	>	1	•	>	D K ≥ 1.6	-40200 °C	3 bar	•	•	>	1	1	>	316L/PEEK
CONTINU	NivoBob <sup>®</sup> NB 4	Lot System	>	1	>	>	≥ 20 g/l	-4080 °C	0.2 bar	•	>	•	ı	ı	>	Al/303/316
	NivoBob <sup>®</sup> NB 3	Lot System	>	>	>	>	≥ 20 g/l	-40250 °C	1,7 bar	•	>	•	ı	ı	>	304/303/316
	Capanivo <sup>®</sup> cn 4	Capacitive	>	ſ	•	ī	DK≥1,6	-40180 °C	25 bar	ſ	>	•	ſ	T	>	S d
JREMENT	RFnivo <sup>®</sup> RF 3	Capacitive	>	ſ	>	•	DK ≥ 1.5	-40500 °C	25 bar	>	>	>	>	Т	>	316L / PPS Ceramic
LEVEL LIMIT MEASUR	Mononivo® MN 4	Vibration	>	ī	1	>	≥ 20 g/l	-40150 °C	16 bar	•	T	•	ī	T	>	316L
LEVEL LIN	Vibranivo <sup>®</sup> vn 1/2/4/5/6	Vibration	>	>	ī	>	۲۵ ۱۳ ۱/۵۵ ۲۵	-40150 °C	16 bar	•	T	>	ī	ī	>	316L
	Rotonivo <sup>®</sup> RN 3/4/6	Rotation	>	ı	>	>	≥ 15 g/l	-401100 °C	10 bar	>	>	•	•	>	>	316L
PRODUCT MATRIX SOLIDS	Product	Measuring principle	Granulate / powder	Solids in liquid	क्ष Material prone स्क to caking	Abrasive material	Sensitivity (bulk density / DK)	Process temperature	Process pressure	High mechanical load	Algh humidity	Vibration in process	*noi	tsoifi Q	EX certification	Sensor material

<u>-</u> -	PRODUCT MATRIX LIQUIDS	LE	LEVEL LIMIT MEASUREMENT	1EASUREME	⊢ Z		CONTINU	CONTINUOUS MEASUREMENT	REMENT	
<u> </u>	Product	Vibranivo® vn 7	Capanivo <sup>®</sup> CN 7	Capanivo® cn 8	RFnivo® RF 8	NivoBob <sup>®</sup> NB 3	NivoCapa® NC8	NivoRadar <sup>®</sup> NR 7	NivoRadar <sup>®</sup> NR 8	NivoGuide <sup>®</sup> NG 8
Σd	Measuring principle	Vibration	Capacitive	Capacitive	Capacitive	Lot System	Capacitive	Radar	Radar	Guided Radar (TDR)
Ş	Waterbased	>	>	>	>	>	>	>	>	>
erties	Oil / viscose media	>	>	>	>	>	>	>	•	>
l prop	Foam	>	>	>	>	1	>	>	•	>
Materia	Material prone to caking	>	>	>	>	>	>	•	•	•
	Interface	•	>	>	>	>	>	1	ı	>
	Sensitivity (Medium density / DK)	≥ 0,5 g/cm³	D K ≥ 1.5	DX ≥ 1.5	DK ≥ 1.5	irrelevant	D X N 1.5	DK ≥ 1.1	DK ≥ 1.1	DK ≥ 1.4
suoi:	Process temperature	-40150 °C (CIP / SIP 150 °C)	-40125 °C (CIP / SIP 150 °C)	-40125°C	-40400 °C	-4080 °C	-40200°C	-4080 °C	-196450 °C	-196450 °C
tibno	Process pressure	40 bar	25 bar	25 bar	35 bar	1.7 bar	35 bar	3 bar	160 bar	400 bar
o ss	High mechanical load	•	•	•	•	•	•	>	>	•
Proce	Immersion length (max.)	4 m	20 m	30 m	25 m	50 m	25 m	E 0	E 0	75 m
	Vibration in process	>	>	•	•	>	•	•	•	•
	Moving surface	>	•	>	>	>	>	>	>	>
*u	ЕНЕОС	>	>	T	1	ı	1	1	>	1
oitso	SIL	ı	ı	>	1	ı	ı	1	>	>
ifitre	Lloyd's Register		>	>	>		>	1		
90	EX certification		>	>	>	>	>	>	>	>
	Wetted parts	Stainless steel (1.4404)	316L/PPS/ PVDF/PEEK	316L/PPS/ PVDF	316L/PFA/ PEEK/ Ceramic	301/303/PA/ PP	316L/PFA/ PEEK	PVDF	316L/PTFE/ PEEK/PP/ Ceramic	316L/PEEK/ Ceramic
* * * We I	* further certificates available on request ** capable of measuring the lightest of material lower than 5 g/l We reserve the right to make changes. The terms and conditions apply (www.uwtgroup.com).	n request est of material low iges. The terms an	er than 5 g/l d conditions apply (	(www.uwtgroup.con	.)·			> • i	perfect choice can be used (details to be clarified) not recommended	s to be clarified)

 $<sup>\</sup>star$  further certificates available on request  $\star\star$  capable of measuring the lightest of material lower than 5 g/l We reserve the right to make changes. The terms and conditions apply (www.uwtgroup.com).

### **GLOBAL PARTNER**

As an expert in level measurement technology, UWT is the reliable, global solution provider for the simple, safe and accurate detection of levels and limit levels across a wide variety of industries and applications.



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