

Innovative Sensors for Solids



Rotonivo®

Rotary Paddle Switch

RN 3/4/6

Point level measurement

- Universal voltage electronics
- -40 °C to +1,100 °C
- Adjustable sensitivity
- Fail safe alarm
- EHEDG applications



Vibranivo®

Vibrating Fork

VN 1/2/4/5/6

Point level and interface measurement

- Very high sensitivity (< 5 g/l - Vibrasil®)
- NAMUR Standard
- Level control of sediments in liquids
- Surface roughness 0.75 µm



Mononivo®

Vibrating Rod

MN 4000

Point level measurement

- Coarse-grained granulate
- Compact limit switch with threads from 1"
- Sensitivity adjustable in 4 settings
- Robust version for overpressure up to 16 bar



RFnivo®

Capacitive Sensor

RF 3000

Point level measurement

- Robust version for overpressure up to 25 bar
- -40 °C to +500 °C
- EHEDG applications
- PROTECTION PLUS version with anti-corrosive coating



"Active Shield" Technology

Capanivo®

Capacitive Sensor

CN 4000

Point level measurement

- Use in metallic and non-metallic containers possible
- Unaffected by build-up
- Adjustable switching delay
- High chemical resistance



"Active Shield" Technology

Nivobob®

Electromechanical Lot

NB 3/4

Continuous level and interface measurement

- Suitable for material with changing temperature and humidity
- Integrated tape cleaner
- Unaffected by electrostatic charge
- Service life up to 500,000 measuring cycles



NivoRadar®

Radar Sensor

NR 3000

Continuous level measurement

- Measurement range of up to 100m
- 78 GHz technology
- 4° beam angle
- Integrated lens cleaner
- Quick Start Wizard



NivoGuide®

Guided Radar

NG 3000

TDR for continuous level and interface measurement

- Rod and rope extension (up to 75m)
- 4...20mA/Hart
- Robust version for overpressure up to 40 bar
- Unaffected by build-up
- Precise measurement in dusty environment



Innovative Sensors for Liquids



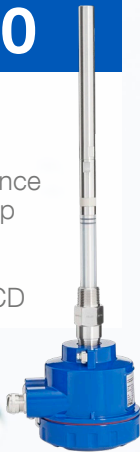
"Tip Sensitivity"
Technology

RFnivo® Capacitive Sensor

RF 8000

Point level and
interface measurement

- High chemical resistance
- Unaffected by build-up
- Robust design
- -40 °C to +400 °C
- Digital version with LCD



Capanivo® Capacitive Sensor

CN 7000

Point level and
interface measurement

- Use in metallic and non-metallic containers possible
- Unaffected by build-up
- Compact design
- Contact or contact-free detection
- For leakage detection



Capanivo® Capacitive Sensor

CN 8000

Point level and
interface measurement

- Use in metallic and non-metallic containers possible
- Unaffected by build-up
- Detection of broad range of material
- Transistor output, relay, Profibus PA
- For leakage detection



"Active Shield"
Technology

NivoCapa® Capacitive Sensor

NC 8000

Continuous level measurement

- Use in non-conductive liquids and foam
- PFA isolation for high chemical resistance
- 2-wire technology with analogue 4...20mA output
- LCD display with control buttons
- Diagnostic functions



NivoGuide® Guided Radar

NG 8000

TDR for continuous level and
interface measurement

- 4...20mA/Hart
- Rod and rope extension (up to 75 m)
- Coaxial version optional
- For extremely high pressure up to 400 bar
- Precise measurement in steam, condensate and build-up



Innovative Sensors for Solids & Liquids



NivoRadar®

Radar Sensor

NR 7100

Without Display

- Measuring range up to 8 m



NR 7200

With Display

- Measuring range up to 15 m



NivoRadar®

Radar Sensor

NR 4100

Mounting thread

- Measuring range up to 30 m



Mounting flange

- Measuring range up to 30 m



Special Features:

- 2-wire technology
- Compact with 1" connection thread (PVDF)
- Various mounting accessories
- Measurement up to antenna tip (no blocking distance)
- High sensitivity (DK value ≥ 1.1)
- 80 GHz technology
- 4° narrow beam angle
- Potted PVDF housing
- Ingress protection IP66/ IP68
- Temperature solution -40 °C to +80 °C
- High measurement accuracy ($\pm 2\text{mm}$)
- Quick-Start Wizard
- WHG certification

Our Solutions for:

- Highly viscous liquids
- Very strong caking
- Steam, outgassing and condensation
- Use in process and storage tanks up to 15 m
- Precise measurement readings in conveying materials
- Corrosion resistance in aggressive materials
- Potentially explosive areas
- Individual positioning of the sensor

Our Solutions for:

- Lightest and heavy bulk goods
- Dusty environments
- Condensation and strong caking
- Use in narrow, medium-sized silos up to 30 m
- Optimum reflections of bulk material with material cone
- Corrosion resistance in aggressive materials
- Potentially explosive areas
- Individual positioning of the sensor