



Simply working

Nivowave[®]

Acoustic Wave Technology

Continuous non contact level measurement for solids and liquids for measuring ranges up to 60m (197ft). Precise measuring even in aggressive media and at process temperatures up to 150°C (302°F).

Integral – NW 5000 / NW 5000L

Integrated acoustic wave level monitor

- Compact “all-in-one” unit
- Easy installation and commissioning
- Programming via integrated keypad or Nivowave PC-Software
- NW 5000 series optimised for solids
- NW 5000L series for measurements in liquids



Smart – NW 4000 / NW 4000L

Transducer and controller unit

- Very attractive cost/performance ratio per measuring point
- Easy programming via Nivowave PC-Software
- Ideal for limited installation height
- NW 4000 series optimised for solids
- L series for measurements in liquids
- Connection via terminal box or potted cable



Technical data	Solids		Liquids	
Series	NW 5000	NW 4000	NW 5000L	NW 4000L
Measurement range	up to 60m (197ft)		up to 11m (36ft)	
Mains voltage	12-30V DC 90-260V AC	9-24V DC	12-30V DC 90-260V AC	9-24V DC
Pressure	max. 2mbar (30psi)			
Process connection	Flange connection with cone		2" thread connection	
Process temperature	-40°C to +85°C (-40°F to 185°F)			
Signal output	4-20mA			
	2 relays	1 relay	2 relays	1 relay
Communication	Modbus, HART	Modbus	Modbus, HART	Modbus



Transducer – NW 1000

Sensor for use with controller NW 2000 series

- Easy installation and wiring
- High temperature applications to +150°C
- Optimised for applications in solids

Level Controller – NW 2000

Controller and evaluation unit for transducer NW 1000 series

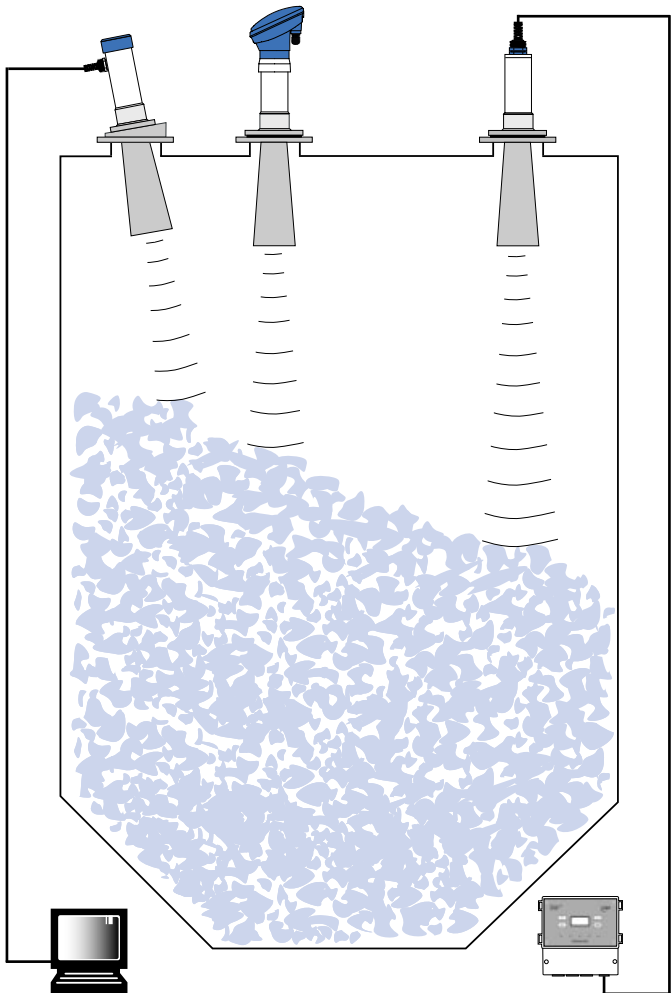
- Clearly arranged display
- Easy programming via integrated keypads on unit or Nivowave PC-Software
- 5 standard programmable relays with status LEDs
- 500m (1650 ft) distance to transducer possible



Technical data	Solids
Series	NW 2000 / NW 1000
Measurement range	up to 60m
Mains voltage	12-30VDC 90-260VAC
Pressure	max. 2nbar (30psi)
Process connection	Flange connection with cone
Process temperature	-40°C to +85°C (-40°F to 185°F)
Signal output	4-20mA 5 relays
Communication	Modbus, HART, Profibus

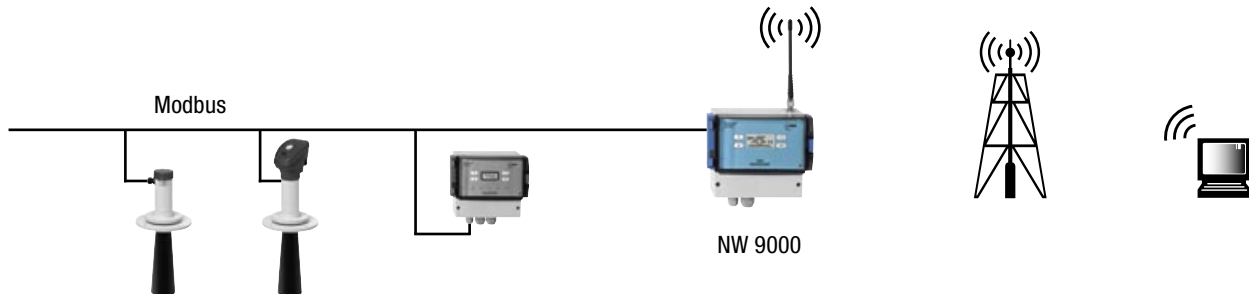
Nivowave® advantages

- Acoustic Wave technology
- high transmitter performance
- wide range of measuring
- mapping of fail echoes
- intelligent echo evaluation
- easy mounting and commissioning



GSM Modul – NW 9000

Remote control of all parameters and visualisation using the Nivowave PC-Software



Nivowave PC-Software



Easy programming
Visualisation
Diagnostics
Connection via NW 9000
(GSM) possible

Nivowave PC-Konverter



Connection of a PC to an
NW 2000, NW 5000,
NW 4000 series
Interface USB -> Modbus
(RS485)

Touchscreen



Visualisation of Current levels
Via Modbus

Digital display EA 100



Digital display for
analog output 4-20mA

Cone



Manual noise reduction for
measurements in solids

Flange



Acoustically isolated flange
for mounting sensor and
cone on top of process area

Mounting accessories

- Aiming kit for aiming the transducer in the application
- Bolts, washers, sealing and nuts to mount a Nivowave unit on a flange
- Terminal Box – unit to connect transducer extension cables