

WIRELESS ANEMOMETER WITH ALARMS FOR CONSTRUCTION SITES AND INDUSTRY

W410/D, **W410XW/D**, W410XL/D

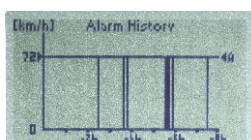
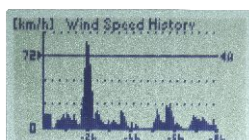


Navis **LIVEDATA**
web interface

FEATURES

- extremely easy mounting due to wireless sensor and magnetic mounting (optional accessories)
- **up to 1300 m range with extended range sensor**
- built-in audible alarm and red/yellow alarm lights
- 4 programmable alarm relay outputs with ON and OFF delays
- 2-zone wind direction alarm
- backlit graphic LCD with large numbers
- Wi-Fi output for sending data to Navis LIVEDATA web interface *
- Bluetooth output signal for smart devices via free application *
- store wind history to SD card with real-time stamp *
- GSM alarm - SMS or push notifications * *

HISTORY DISPLAYS



FUNCTIONS

- current wind speed and direction
- bar graph for current and peak wind speed
- 8 h wind speed history graph
- 8 h alarm history graph
- temperature
- logging of wind data to micro SD card * (more than 1 year history)

APPLICATIONS

- crane applications
 - mobile cranes
 - tower cranes
 - bridge cranes
- lift applications
- all applications where wind alarm is needed
- remote wind monitoring and logging

* depends on the model
** optional accessories



NAVIS

COMPATIBLE SENSORS:



WS 010-1A (standard range WS sensor)
WS 011-1A (extended range WS sensor)
WS 011-1-EX (Atex certified WS sensor)



WSD 010-1A (standard range WSD sensor)
WSD 011-1A (extended range WSD sensor)
WSD 011-1-EX (Atex certified WSD sensor)

ORDERING (SEE THE SELECTION CHART ON PAGE 4):

Display unit

- 1 **W410/D** display unit
- 1 **W410XW/D** display unit (Wi-Fi, Bluetooth, 4-20mA outputs)
- 1 **W410XL/D** display unit (Wi-Fi, Bluetooth, 4-20mA outputs, logging to micro SD card)

Sets with sensors included

- 2 **W410/WS** W410/D with WS 010-1A sensor
- 3 **W410/WSD** W410/D with WSD 010-1A sensor
- 2 **W410XW/WS** W410XW/D with WS 011-1A sensor
- 3 **W410XW/WSD** W410XW/D with WSD 011-1A sensor
- 2 **W410XL/WS** W410XL/D with WS 011-1A sensor
- 3 **W410XL/WSD** W410XL/D with WSD 011-1A sensor



1



2



3

Access to Navis LIVEDATA web interface:

- **FREE BASIC ACCESS** (1 min data refreshing, 24h graph, ...)
- **PAYABLE ADVANCED ACCESS** (2 seconds data refreshing, up to 1 month graphs and data logging, ...)



OPTIONS

Individual Wind tunnel certificated version available

OPTIONAL ACCESSORIES

- 1 External antenna with 3 m cable, magnetic mounting
- 2 YAGI antenna with 2 m cable
- 3 CM4000 Mobeye GSM Alarm module
- 4 Power adapter, 12V DC/1 A



1



2



3



4



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OPTIONAL MOUNTING ACCESSORIES

- 5 MDMA/410 Magnetic display mounting assembly



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TECHNICAL DATA

Wind speed measurement range:	0,6...50 m/s
Wind direction measurement range:	0°– 359° (6 ° graph resolution)
Temperature measurement range:	-30....+60 °C
Wind speed units:	m/s, km/h, knots, mph
Temperature units:	°C, °F
Wind speed averaging period:	selectable 2 s, 10 s, 30 s
Wind direction averaging period:	10 s
Wind speed resolution:	0,1 m/s
Wind direction resolution:	6°
Temperature resolution:	1°C
Wind speed accuracy:	+/- 2,5 %, calibration possible in 0,5% steps
Wind direction accuracy:	+/- 2,5°, adjustable offset +/- 180°
Temperature accuracy:	+/- 1°C
Communication frequency :	868 MHZ (915 MHZ at FCC models)
Antenna input:	50 Ohm, SMA connector
Range:	
- with standard range sensor	up to 500 m visible distance
- with extended range sensor	up to 1300 m visible distance
- with Yagi antenna	up to 3 x nominal range
Operating voltage:	12 - 24 V DC
Power consumption:	max. 500 mA
Temperature operating range:	-10 ... +60 °C
Outputs:	4 x relay, contact rating 2 A/24 V, programmable ON and OFF delays
Alarms:	adjustable max. alarm - red light + continuous sound signal adjustable pre. alarm - yellow light + interrupted sound signal
Sound signal:	93 dB/30 cm
Casing:	150 x 80 x 55 mm, PC (Polycarbonate)
Weight:	320 g

ADDITIONAL FOR W410XW and W410XL

Wi-Fi data transmission rate:	every 2 seconds
Wi-Fi transmission frequency:	2,4 GHz
Wi-Fi range:	Up to 20 meters. It can varies with type of Wi-Fi router
Bluetooth range:	Up to 30 meters
Navis LIVEDATA web interface URL:	http://www.navis-livedata.com
The name of the app in the Google Play / Apple Store:	WINDY ANEMOMETER
Analog signal outputs:	2 x 4...20 mA (not isolated, common ground with power supply) 4 mA = 0 m/s , 0° 20 mA = programmable 10 - 50 m/s , 359°

ADDITIONAL FOR W410XL

Logging:	average and maximum wind speed, wind direction, temperature with battery backed up real time stamp
Logging interval:	selectable: 10 s, 1 min, 10 min, 60 min
Data recording:	minimum 12 months, .txt data format
Memory card:	micro SD (enclosed)

Android application requires device with 4.3 OS or newer with Bluetooth BLE



SELECTION CARD - W410 DISPLAYS

TYPE	FUNCTIONS				POWER SUPPLY		OUTPUTS		ALARMS			CONNECTIVITY		COMPATIBLE SENSORS			
	Wind speed & wind direction	History graphs	Logging to SD card	Storing to cloud (prescription needed)	External, 12 - 24 V DC	Battery	4 Relay outputs	4-20 mA output	Integrated sound alarm	Integrated alarm lights (orange + red)	Alarm outputs (relays)	BLUETOOTH to free App	WiFi to Navis livedata cloud	WS 010-1 (standard range, wind speed)	WS 011-1 (extended range, wind speed)	WSD 010-1 (standard range, wind speed & direction)	WSD 011-1 (extended range, wind speed & direction)
W410/D	✓	✓			✓		✓		✓	✓	✓			✓	✓	✓	✓
W410XW/D	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
W410XL/D	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
W410/BAT/D	✓	✓				✓			✓	✓				✓	✓	✓	✓
W410XB/BAT/D	✓	✓				✓			✓	✓	✓	✓		✓	✓	✓	✓

SELECTION CARD - W410 SETS WITH SENSOR INCLUDED

TYPE	FUNCTIONS				POWER SUPPLY		OUTPUTS		ALARMS			CONNECTIVITY		INCLUDED SENSORS				
	Wind speed	Wind speed & wind direction	History graphs	Logging to SD card	Storing to cloud (prescription needed)	External, 12 - 24 V DC	Battery	4 x Relay outputs	4-20 mA output	Integrated sound alarm	Integrated alarm lights (orange + red)	Alarm outputs (relays)	BLUETOOTH to free App	WiFi to Navis livedata cloud	WS 010-1 (standard range, wind speed)	WS 011-1 (extended range, wind speed)	WSD 010-1 (standard range, wind speed & direction)	WSD 011-1 (extended range, wind speed & direction)
W410/WS	✓		✓			✓		✓		✓	✓	✓			✓			
W410/WSD		✓	✓			✓		✓		✓	✓	✓					✓	
W410XW/WS	✓		✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓			
W410XW/WSD		✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓				✓
W410XL/WS	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		
W410XL/WSD		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓				✓
W410/BAT/WS	✓		✓				✓			✓	✓				✓			
W410/BAT/WSD		✓	✓				✓			✓	✓						✓	
W410XB/BAT/WS	✓		✓				✓			✓	✓	✓	✓		✓			
W410XB/BAT/WSD		✓	✓				✓			✓	✓	✓	✓					✓