

# WIRELESS ANEMOMETER WITH ALARMS FOR CONSTRUCTION SITES AND INDUSTRY

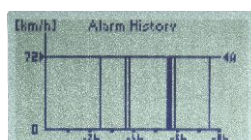
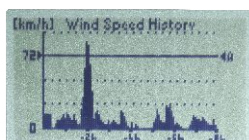
W410/D, W410XW/D, W410XL/D



## 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

## 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



5

### OPTIONAL MOUNTING ACCESSORIES

- 5 MDMA/410 Magnetic display mounting assembly



#### 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<br>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:                     | <a href="http://www.navis-livedata.com">http://www.navis-livedata.com</a>   |
| 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)<br>4 mA = 0 m/s , 0°<br>20 mA = programmable 10 - 50 m/s , 359° |

#### ADDITIONAL FOR W410XL

|                   |   |
|-------------------|---|
| Logging:          | average and maximum wind speed, wind direction, temperature<br>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 |            | ✓                           | ✓              |                    |  |                        | ✓       |                   |                | ✓                      | ✓                                      |                        | ✓                     |                              |  |                                       |  | ✓  |