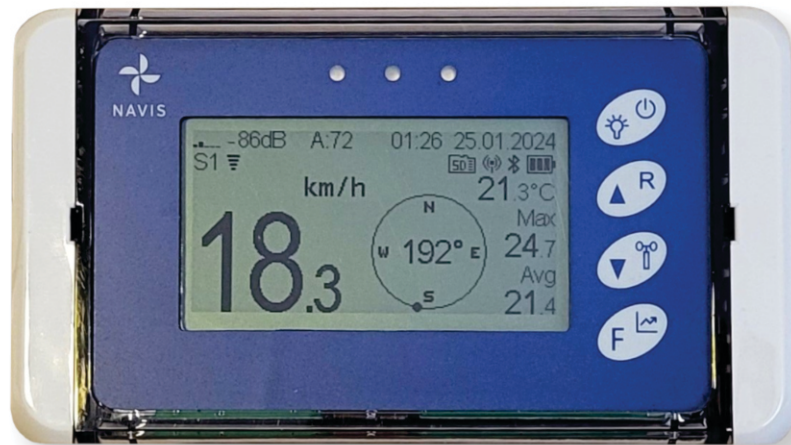# LONG RANGE
WIRELESS ANEMOMETER & LOGGER
Type: WL13/D, WL13X/D

FEATURES

- easy-to-use solution for wind site evaluation
- simultaneously receives displays and stores data from up to 3 sensors *
- stores more than one year of wind history data
- displays and stores all vital wind and temperature data
- wireless range up to 1.000 m
- up to 1 year battery life
- battery or external powered
- built-in battery back-up real time clock
- night illuminated LCD display
- Wi-Fi output for sending data to Navis LIVEDATA web interface *
- Bluetooth output signal for smart phone via free application *
- store data to SD card with real-time stamp*
- wind tunnel test report included (if set is ordered)
- FCC versions available (for one sensor only)

* only at WL13X/D model

FUNCTIONS

- current, average and maximum wind speed
- wind direction
- temperature
- history graphs for each installed sensor, 4h and 24h wind speed, 24h wind direction, 24h temperature
- 30 days history list of daily average/maximum wind speed and max/min temperature
- date and time
- Max and Min wind speed alarm - acoustic and optical

Store to SD card

- average and maximum wind speed in selected interval
- average wind direction (with WSD sensor)
- temperature
- each data has date and time stamp

COMPATIBLE SENSORS

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

WSD 010-1A (standard range WSD sensor)
WSD 011-1A (extended range WSD sensor)
WSD 011-1S (extended range WS sensor, solar)
WSD 011-1A-EX (Atex certified WSD sensor)

ORDERING

Display units
1 **WL13/D**   (display only, can receive 1 sensor)
1 **WL13X/D**   (display only, can receive up to 3 sensors, WiFi and Bluetooth output)

Sets with one sensor included
2 **WL13/WS**   WL13/D with WS 010-1A sensor
2 **WL13X/WS**   WL13XW/D with WS 011-1A sensor
3 **WL13/WSD**   WL13/D with WSD 010-1A sensor
3 **WL13X/WSD**   WL13XW/D with WSD 011-1A sensor

1   2   3

OPTIONAL ACCESSORIES

1 Remote antenna with 3 m cable, magnetic mount
2 Remote flat antenna with 3 m cable, self-adhesive mount
3 YAGI antenna
4 Spare micro SD card
5 USB C power adapter
6 Protective transport case 40 x 30 x 12 cm, ABS
7 WRP 011-1 REPEATER / RANGE EXTENDER

MOUNTING ACCESSORIES

8 MDMA Magnetic display mounting assembly

6

1   2   3   4   5   8

NAVIS elektronika
E-mail: info@navis-elektronika.com
www.navis-anemometers.com

TECHNICAL DATA

Wind speed measurement range:	0,6 - 50,0 m/s
Wind direction measurement range:	0 ^{o} - 359 ^{o}, adjustable offset +/- 180°
Temperature measurement range:	-30....+60 ^{o}C (measure at sensor)
Measuring rate:	every 0,5, 1 or 2 seconds, depends on sensor setting (2 s default)
Data update:	(0,5 s; 1 s; 2 s depends on sensor setting)
Wind speed units:	m/s, km/h, knots, mph
Temperature units:	^{o}C, ^{o}F
Wind speed resolution:	0,1 m/s
Wind direction resolution:	1 ^{o}
Temperature resolution:	1 ^{o}C
Wind speed accuracy:	typ. +/- 2,5 %
Wind direction accuracy:	+/- 2,5 ^{o}
Temperature accuracy:	+/- 0,5 ^{o}C
External power supply (necessary for WiFi On):	USB C adapter 5V DC, 0,5 A (not enclosed)
Battery:	3 x 1,5 V, C size Alkaline, LR14 (not included)
	1 x 3 V CR2032 Lithium (included, pre-inserted)
Battery life (single sensor installed, WiFi Off):	up to 12 months with display auto off mode, backlighting Off
	up to 6 months with display active mode, backlighting Off
Battery life (2 or 3 sensors installed):	up to 200 h
Wireless range: WL13/WS, WL13/WSD:	up to 400 m
WL13X/WS, WL13X/WSD:	up to 1000 m
with connected Yagi antenna:	up to 2-3 x nominal range
Operating Frequency:	868 MHZ, 915 MHz (FCC version)
Antenna input:	50 Ohm, SMA connector
Temperature operating range, logging, alarming:	-30 ... +50 ^{o}C
Temperature operating range, display reading:	-10 ... +50 ^{o}C
Casing:	151 x 80 x 61 mm, PC (Polycarbonate), IP65
Weight:	350 g

Logging

SD card (included):	micro SD formatted in FAT or FAT32 (recommended)
Log interval:	selectable 1s, 5s, 10 s, 1 min, 10 min, 60 min
File creation on SD card:	create new file every day
Data format:	.csv (comma separated values)
Real time clock battery (preinstalled):	1 x 3 V CR2032 Lithium

ADDITIONAL FOR WL13X/D

Wi-Fi packet transition interval:	2 seconds
Wi-Fi frequency band:	2,4 GHz
Wi-Fi range:	up to 20 meters. It can vary 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

Alternations in specifications are subject to change without notice.

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

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