

Part Number	Wind101A
Gust Survival Speed	214 mph (95m/s)
Starting Threshold	1.75mph (0.75m/s)
Maximum Measurable Speed	100 mph (45m/s)
Accuracy	±2 mph 0-10 mph ±2.5% of reading 10-100 mph
Resolution	Varies with reading rate 0.17 mph (.07m/s) @ 10 sec rate
Rotation Diameter	7.5" (191mm)
Weight	1.13lbs (513g)
Mount	Accepts 0.5" (13mm) dia. Mast
Tripod/Mast Kit	Contact factory for availability
Operating Temperature Range	-20 to 60°C (-4 to 140°F)
Memory	500,000 readings 250,000 readings in repeatable start/stop mode
Wrap Around	Yes
LED Indicator	Red & Green
Required Interface Package	IFC200
Baud Rate	115,200
Typical Battery Life	Dependent on frequency and duty cycle. 10 months typical at 25 °C and 10 second reading rate
Enclosure Dimensions	3.66" x 2.45" x 0.93" (93mm x 62mm x 24mm)

### Battery Warning

**WARNING: FIRE, EXPLOSION, AND SEVERE BURN HAZARD. DO NOT SHORT CIRCUIT, CHARGE, FORCE OVER DISCHARGE, DISASSEMBLE, CRUSH, PENETRATE OR INCINERATE. BATTERY MAY LEAK OR EXPLODE IF HEATED ABOVE 80°C (176°F).**

*Specifications subject to change.*

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**Wind101A**  
Wind Speed Data Logging System

## Product Notes

### Installation of the Wind101A (Pulse101A-2 pos. terminal block)

When installing the Wind101A, refer to the following:

- The anemometer should be mounted vertically in an open area, as high up as possible. Preferably on a pole.
- It can be mounted using a cotter pin on a 0.5in. (13 mm) diameter mast with a #3 hole, 0.35 in. (11 mm) from the top.
- The anemometer is non-directional, and will measure wind blowing in any horizontal direction. To ensure the most accurate readings, adjust the position of the anemometer on the bracket so that it is level.
- Run the provided cable to the location where the data logger will be mounted, securing it roughly every 2 feet.
- There are 4 mounting holes (0.2 in. (5mm) diameter spaced 2.5 in. (63.5mm) square) on the weather resistant enclosure.

### Changing the Reading Rate

The Wind101A comes programmed to provide the average wind speed using a 10 second reading rate. If a different reading rate is desired the engineering units gain will have to be reprogrammed on the device. To do this, click the **Engineering Units** button from the **Start Device** dialog box, and use the **Device Units Wizard**. Follow the wizard's prompts to:

- Enable use of portable engineering units.
- Enter an appropriate description and label (MPH or KPH).
- Enter the **Offset** and **Gain** values (offset=0 / gain=see below).
- Enable **Engineering Units**.

Click the **Finish** button to save the units to the device.

### Engineering Units Gain Quick Reference

For additional information on Engineering Units, please refer to the Engineering Units Video on our website.

Reading Rate	MPH	KPH	M/S	KNOTS
2 sec	0.425	0.68397	0.18999	0.36931
5 sec	0.17	0.27359	0.075997	0.14773
10 sec	0.085	0.13679	0.037998	0.073863
30 sec	0.028333	0.045598	0.012666	0.024621
1 min	0.014167	0.022799	0.006331	0.012310
5 min	0.0028333	0.0045598	0.0012666	0.0024621
10 min	0.0014167	0.0022799	0.00063331	0.0012310

### LEDs

Green LED blinks: 10 seconds to indicate logging, 15 seconds to indicate delay start mode

Red LED blinks: 10 seconds to indicate low battery and/or memory

### Password Protection

An optional password may be programmed into the device to restrict access to configuration options. Data may be read out without the password.

### Multiple Start/Stop Mode Activation

To start device: Press and hold the pushbutton for 5 seconds, the green LED will flash during this time. The device has started logging.

To stop the device: Press and hold the pushbutton for 5 seconds, the red LED will flash during this time. The device has stopped logging.

## Installation Guide

### Installing the Interface cable

- IFC200: Insert the device into a USB port. The drivers will install automatically.

### Installing the software

Insert the Software CD in the CD-ROM Drive. If the autorun does not appear, locate the drive on the computer and double click on Autorun.exe. Follow the onscreen instructions.

### Connecting the data logger

- Once the software is installed and running, plug the interface cable into the data logger.
- Click the Communication Menu, then Auto Configure Port.
- After a moment, a box will appear stating a device has been found.
- Click **OK**. The **Device Status** box will appear. Click **OK**.
- At this point, communications have been configured for your logger. These settings can be found under the **Communication Menu**.

*Note: For additional installation instructions refer to your "Data Logger & Software Operating Manual".*

## Device Operation

### Starting the data logger

- Click **Device Menu** then **Start Device**.
- Choose the desired start method.
- Choose the start parameters by selecting a **Reading Rate** suitable for your application.
- Enter in any other desired parameters and click **Start**.
- A box will appear stating the data logger has been started. Click **OK**.
- Disconnect the data logger from the interface cable and place it in the environment.

*Note: The device will stop recording data when the end of memory is reached or the device is stopped. At this point the device cannot be restarted until it has been re-armed by the computer.*

### Downloading data from a data logger

- Connect the data logger to the interface cable.
- Click the **Device Menu** then **Read Device Data**. This will offload all recorded data onto a PC.

## Device Maintenance

### Battery Replacement

**Materials:** Small Phillips Head Screwdriver, 3/32" HEX Driver, Replacement Battery (LTC-7PN)

- Remove the Data Logger from the Waterbox101A using the Allen Key.
- Puncture the center of the back label with the screw driver and unscrew the enclosure.
- Remove the battery by pulling it perpendicular to the circuit board.
- Insert the new battery into the terminals and then screw the enclosure back together.

*Note: Be sure not to over tighten the screws or strip the threads.*

### Recalibration

The Wind101A system includes a Pulse101A data logger and an anemometer. The data logger is programmed with engineering units to display in the units of wind speed.

The Pulse101A has a digital input signal and cannot be calibrated. A Certificate of Conformance can be provided.

*To send the devices back, visit [www.madgetech.com](http://www.madgetech.com), select Services then RMA Process.*