

breeze

Quickstart guide



etesian
technologies

1) MOUNT SENSOR

Sensor mounts to a one half (1/2) inch round bar or tube. It is secured with a setscrew and cotter pin. Provide a 1/8-inch hole on the diameter of the stub at 3/8 inch from the end of the stub to accommodate the cotter pin. Sensor must be vertical at all time to correctly measure the wind speed. ***When viewed from the location of the base unit the sensor antenna should be facing to either the left or right***, not facing directly at or away from the base unit.

The allowable distance between the base unit and sensor depends upon the antenna option purchased:

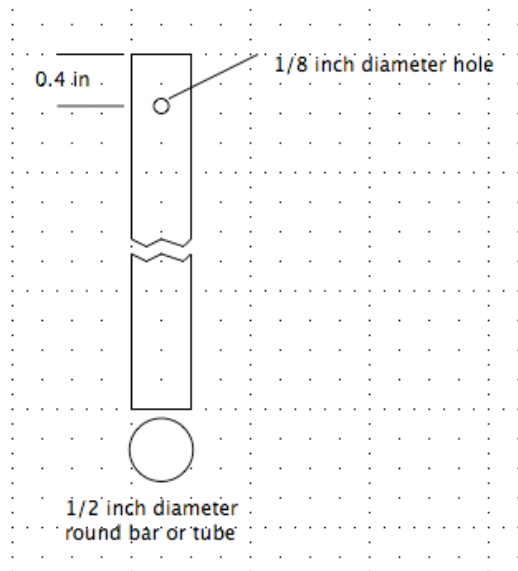
Omni directional stub antenna - 100 feet

Omni directional stub antenna and pre-amplifier – 300 feet

Hi gain directional (Yagi) antenna – 300 feet

Hi gain directional (Yagi) antenna and pre-amplifier 500 feet

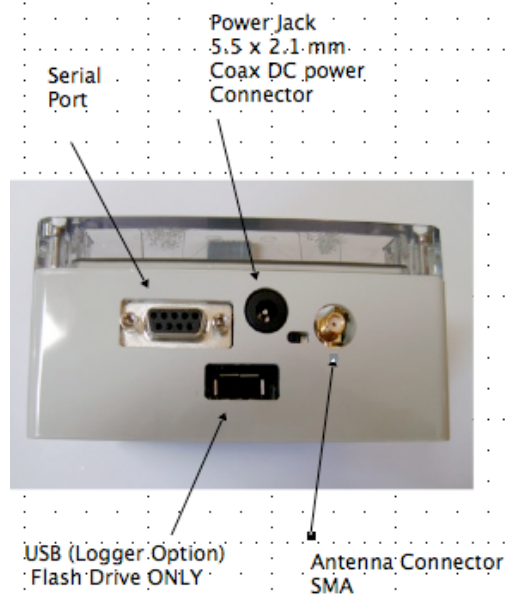
Allowable distance means line-of-sight, with no obstacles. Contact us if you need more than 500 feet between sensor(s) and base unit.



Antenna points directly to side when viewed from base unit.

2) INSTALL BASE UNIT

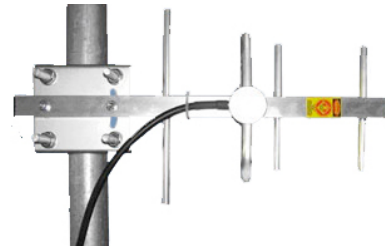
If you purchased the wall transformer option, it operates on standard US household current, 117 VAC, 60 Hz. If you purchased the pigtail cable, the base unit accepts 9 to 28 VDC, 100 milliamps maximum.



Pigtale Cable



Omni directional stub antenna

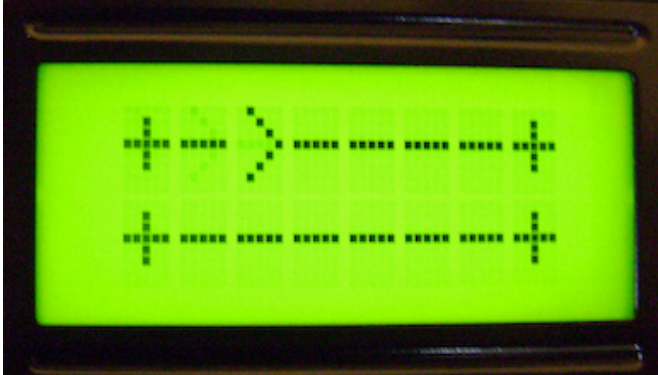


Yagi antenna (shown vertical)

Connect the pigtail cable to a source of 9 to 28 VDC, center positive connection; the cable will be clearly tagged for proper polarity. Extend antenna cable and route from exterior through opening in wall. Base unit is NOT suitable for external exposure. Mount omni antenna so that stub is horizontal and NOT pointing at the sensor, but to the side, the same as the sensor's antenna. If you have the Yagi antenna option, mount with elements horizontal but aimed directly at the sensor.

3) OPERATION

a) On power-up the display scrolls *Etesian Technologies*.



b) Searching for signal or wind below 5 MPH



c) Corrupt packet. Data should resume shortly



d) Normal operation

TECHNICAL SPECIFICATIONS:

OVERALL SENSOR

Weight: 11 oz.

Mounting: 13 mm (0.5 in) diameter mast with cotter pin and mast set screw.

Overall height – 18.4 cm (7.25 in)

Main housing diameter – 6.1 cm (2.39 in)

Power Requirements: None, self powered

SPEED

Conical cups measure 51 mm (2 inches) in diameter

Rotor diameter is 190 mm (7.5 inches)

Standard AC output, frequency proportional to cup rotational speed

Fully hardened beryllium-copper shaft running in self-lubricating modified Teflon bearings

Rated bearing PV (pressure-velocity) factor is 20,000 – At 15 mph PV is approx. 500. – At 100 mph PV is approx. 2,000.

Distance constant = 10 feet (3.0 meters)

Accuracy: within 0.1 m/s (0.2 mph) for the range 5 m/s to 25 m/s (11 mph to 55 mph)

RECEIVER/LOGGER

Dimensions: 4.7 x 3.5 x 2.4 inch

Housing material: polycarbonate, clear cover

Local Display: Backlight LCD display 0.22 inch character height

Operating Frequency: ISM band, 916.5 MHz

Power Requirements: 9 – 14 VDC, 20 mA

Antenna Connector: SMA female

Input Connector: barrier terminal block, 0.375 pitch, accommodates 12 to 24 AWG wire

Digital Output: RS-232, 9600 baud

Wired Analog Inputs:

Direction: Potentiometer based wind vanes (10K Ohms typical)

Speed: AC generator or reed switch compatible

Alarm/Control: High and low set points programmable. Averaging interval programmable

Normally open relay contacts rated 24 VDC 0.5 amp.

File Structure: Text CSV day files saved to USB flash drive – files compatible with most spreadsheet programs. Logging interval from 1 minute to 24 hours. Mean, Standard Deviation, Maximum and Minimum logged for each interval.



274 Sunderland Road, Amherst, MA 01002 413 835-5387

<http://www.etesian-tech.com>

Prices and specifications subject to change without notice 0310

Etesian Technologies Warrantee Statement

Etesian Technologies LLC warrants its products to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. Its obligation under this warranty is limited to repairing or replacing, at its own sole discretion, any such defective products. If a unit is to be returned to Etesian Technologies LLC, a Returned Material Authorization (RMA) number from Etesian Technologies LLC warranty department must be obtained. Products must be returned with transportation charges prepaid, and must be accompanied by a brief description of the problem encountered and with proof of purchase, including the date and place of purchase. This warranty does not apply to equipment that has been damaged by accident, negligence or misapplication, or which has been altered or modified in any way. This warranty applies only to the original purchaser.

EXCEPT AS PROVIDED HEREIN, ETESIAN TECHNOLOGIES LLC MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR APPLICATION OR PURPOSE. Some states or provinces may not permit limitation or exclusion of implied warranties. Therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

EXCEPT AS PROVIDED ABOVE, IN NO EVENT WILL ETESIAN TECHNOLOGIES LLC BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF THIS PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. Especially, ETESIAN TECHNOLOGIES LLC is not liable for any costs, such as lost profits or revenue, loss of equipment, loss of use of equipment, loss of software, loss of data, costs of substitutes, claims by third parties or otherwise. This warranty gives you specific legal rights and you may also have other rights that vary from province to province or state to state.