

WINDLOGGER

Wind analysis has never been so simple or inexpensive!

Choosing a wind system depends on the wind available at your site. How much power will it produce? This is what determines whether the investment will be worthwhile. Power output estimation requires two things:-

- details of the wind turbine
- details about the wind at your site

Manufacturers provide the first, the Windlogger will produce the second.

What wind data do you need? The average wind speed is not enough. You need the wind speed distribution or what percentage of the time the wind is strong enough to provide full output from the wind turbine, what percentage at half output, etc.

The Windlogger is purpose built for this job. It processes the results as it collects them. The latest distribution is available at any time at the flick of a switch. No further processing of the wind data is normally required.

QUALITY

Windlogger is built up to standard, not down to a price.

Windlogger offers:-

- 30 bins
- 12 month battery life
- Range of 0-30 m/s
- Accuracy of 0.5 m/s
- Timekeeping to ± 2 min/month
- CMOS integrated circuitry for maximum reliability
- Operating temperature range of -20° to $+60^{\circ}\text{C}$

Windlogger comes equipped with its own 3 cup anemometer, and 15m of signal cable.

Compact, reliable and easy to use Windlogger comes complete with a comprehensive guide to wind system selection. Windlogger enables you to make the right wind system decision first time. Windlogger is a lot cheaper than the wrong decision!

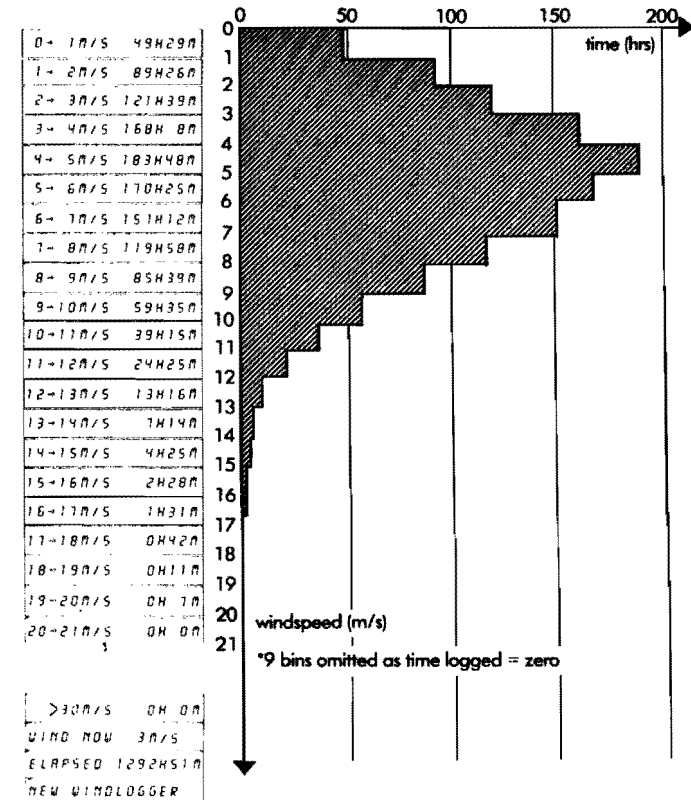
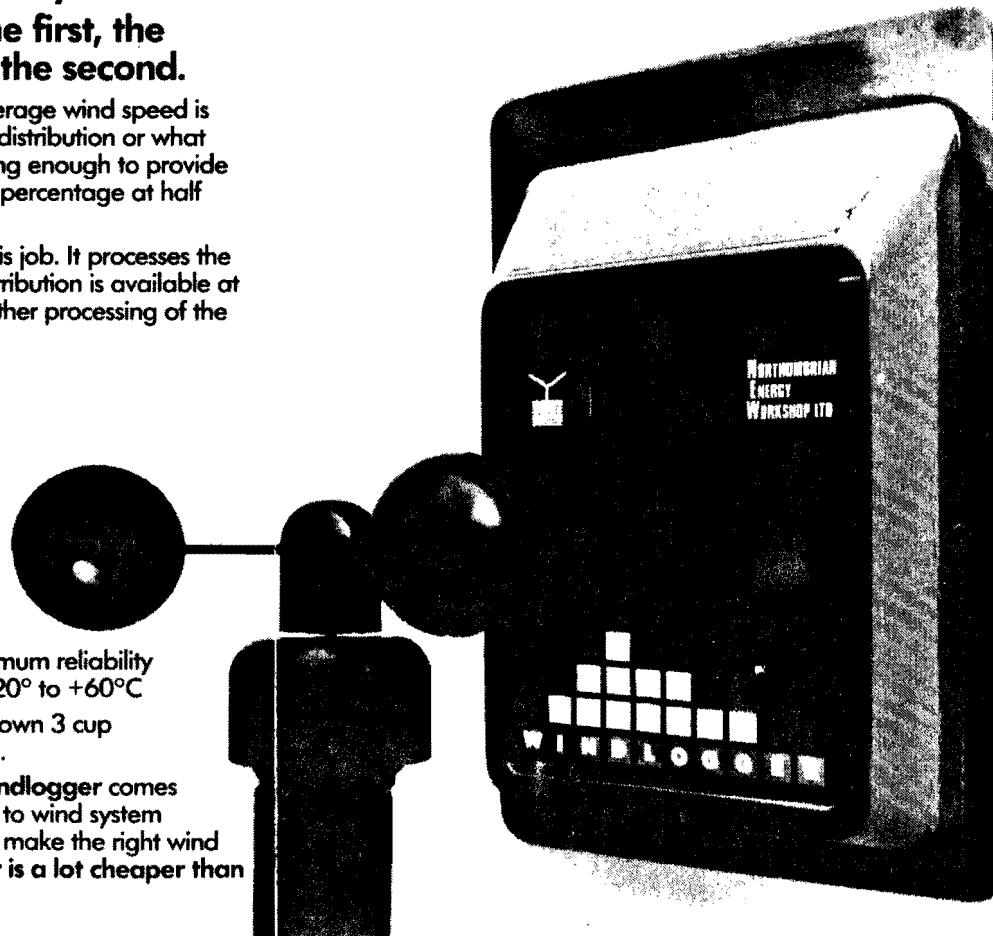
OPERATING PRINCIPLES

Every minute Windlogger records the windspeed in the memory appropriate to that particular speed band. Retrieving the data is simplicity itself. At the flick of a switch Windlogger's visual display cycles through the recorded data showing the speedbands and cumulative times logged for each band in hours and minutes, along with current windspeed and total elapsed logging time.

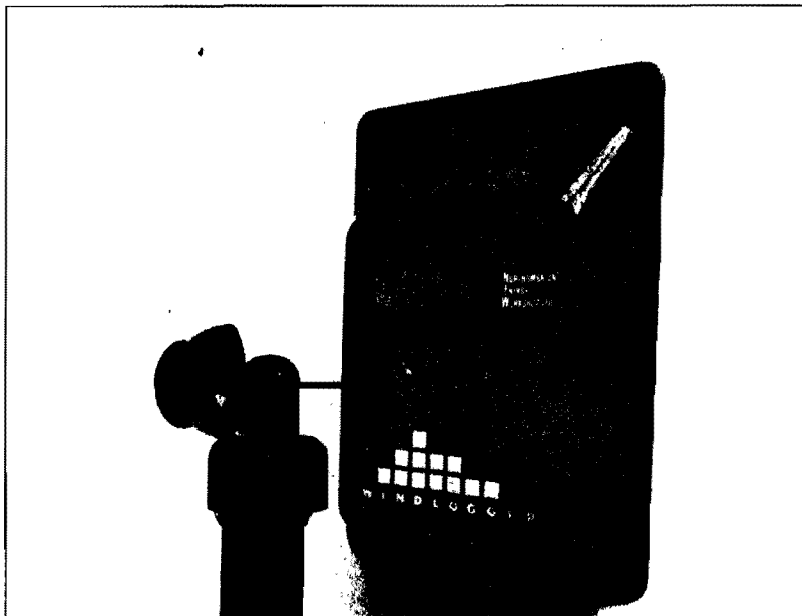
RELIABILITY

Low power requirements, and a wide range of operating temperatures combine with the 'no moving parts' electronics to guarantee Windlogger's tremendous reliability, even at sub-zero temperatures. Rigorous quality control means that Windlogger just keeps on running.

'EASY TO READ'



Data is presented simply and clearly so constructing a wind velocity histogram is quickly and easily accomplished.



Windlogger has been developed by Northumbrian Energy Workshop as a compact, reliable and easy to use binning datalogger system for less than a wind run anemometer.

Choosing a wind system depends on the wind speed distribution at your site. Every minute, Windlogger records the windspeed in the memory appropriate to that particular wind speed band. At the flick of a switch Windlogger's visual display cycles through the recorded data showing the speedbands and cumulative times logged for each band in hours and minutes, along with current windspeed and total elapsed logging time.

Windlogger offers

- 30 Bins
- 12 month battery life
- Range of 0 - 30 m/s
- Accuracy of 0.5 m/s
- Time keeping to ± 2 min/month
- CMOS integrated circuitry for maximum reliability
- Operating temperature range of -20 to +60 C

Windlogger comes complete with its own 3 cup anemometer and 15m of signal cable.

Windlogger reliability

Low power requirements; a wide range of operating temperatures; CMOS integrated circuits and rigorous quality control combine to guarantee Windlogger's tremendous reliability.

WINDLOGGER SPECIFICATION

PHYSICAL

Windlogger	Dimensions 220mm (w) x 320mm (h) x 50mm (d)
	Weight 0.75kg unpacked
	Operating Temperature display off -20° to +60° C display on -10° to +60° C

Anemometer

3 cup, UV stabilized plastic
Mounting horizontal M5 brass stud
Supplied with 15m signal cable

ELECTRONICS

CMOS integrated circuits used throughout
Switch mode power supply

POWER REQUIREMENTS

Source	Lithium Tadiran TL 5137/T battery 12 months operation over full temperature range Can be externally powered from 2.6 - 5.0 V DC
---------------	---

Consumption

less than 2mA at 5V DC

SAMPLING

Windspeed	every minute count integrated.
Range	0 to 60 m/s
Resolution	0.1 m/s
Accuracy	0.5 m/s

TIMEKEEPING

Accuracy	± 2 minutes per month
-----------------	---------------------------

FUNCTIONS

Velocity Distribution	Windspeed distribution from 30 bins 1m/s wide based on 1 minute average readings
Resolution	1 minute
Maximum count	9999 hours
Current Windspeed	Displayed every five and a half minutes based on last one minute average Resolution 1m/s

DISPLAY CYCLE

Display	16 character alphanumeric LCD Display is changed every 10 seconds Steps through bins one at a time and then displays elapsed time and current wind speed.
Cycle time	5.5 minutes

Northumbrian Energy Workshop are leading specialists in the design and installation of renewable energy systems. Our reputation for innovation and technical excellence is maintained today by the incorporation of only the best technology into our systems.

Every effort has been made to ensure the accuracy of this data sheet at the time of going to press. However, because of a policy of continued development and improvement N.E.W. Ltd. reserves the right to alter specification without notice.