Digital Anemometer - Datasheet

DA-100

Digital Anemometer

Digital Anemometer allows measuring atmospheric effects, namely wind velocity, temperature, and humidity for better data analysis. It also possesses various features such as Beaufort scale, switch between Celsius and Fahrenheit, switch between metric and imperial system, or the battery status indicator. The Digital Anemometer is best used with Horizon Renewable Educational Energy Set 2.0 (FCJJ-37), Wind Energy Science Kit (FCJJ-39), Wind to Hydrogen Science Kit (FCJJ-56), and Horizon Energy Box (FCJJ-40). The device is capable of displaying minimum, average, and maximum wind velocity value. Its compact design makes the Digital Anemometer suitable for both outdoor and indoor use.

Using Digital Anemometer is very user-friendly, and brings extra value for both teachers and students to the experiments by allowing students to acquire specific data. That can be utilised for example in finding the most efficient wind pitch blade combination at any given wind conditions, or how, if at all, relative humidity & temperature affect hydrogen production.

Features

✓ Air Velocity Measurement Range: 0.3 to 30m/s (±5%)
✓ Temperature Measurement Range: -10 to 50°C (±1°C)
✓ Humidity Measurement Range:0%-99% (±5% at 20%-90%)
✓ Air Velocity Unit Selection: m/s, ft/min, knots, km/h, mph
✓ Beaufort scale
✓ °C / °F selection
✓ Max/Min/Avg Reading Selection
✓ Hold Function
✓ Wind-chill Indication
✓ Low Battery Warning
✓ Auto Power Off (with override function)
✓ Calibration Function
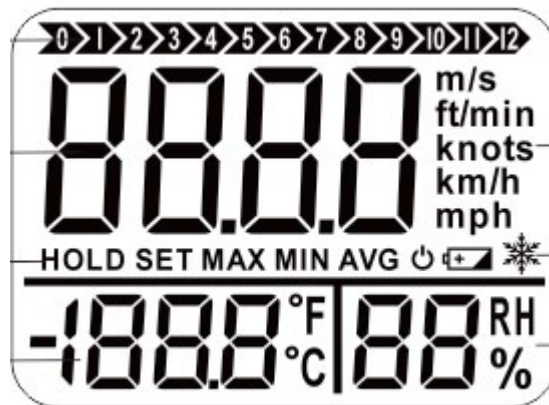✓ Resolution: 0.1m/s, 1%,0.1 °C

Product description

1. Vane Impeller
2. Temperature & Humidity Sensors
3. LCD with Blue Backlight
4. Wind Speed Unit & Temperature selection
5. Power Button
6. Set function Button
7. Battery Cover
8. Lanyard Attachment Point

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Specification

Wind speed range				
Unit	Range	Resolution	Threshold	Accuracy
M/s	0 ~ 30	0.1	0.1	±5%
Ft/min	0 ~ 5860	19	39	
Knots	0 ~ 55	0.2	0.1	
Km/hr	0 ~ 55	0.2	0.3	
Mph	0 ~ 65	0.2	0.2	

Temperature and Humidity range			
Unit	Range	Resolution	Accuracy
°C	-10 ~ 50	0.1	±1
°F	14 ~ 122	0.1	±2
%RH	20 ~ 90%	1	±5%
Battery	CR2032 2.0V		
Operating temperature	-10 ~ 50°C(14 ~ 122°F)		
Operating humidity	≦90%		
Current consumption	About 2.5mA		
Weight	60g		

LCD Display

Dimensions & Packaging

✓ 115x42x19 mm
✓ packaged in transparent, bubble wrap

Included Components

1. Anemometer
2. 3 V, flat, rounded battery