User manual

Digital Anemometer
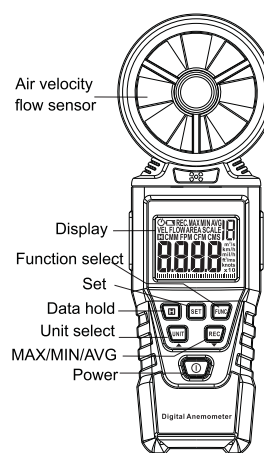

⚠ Before using the instrument, please read this manual carefully, and save it well for future using.
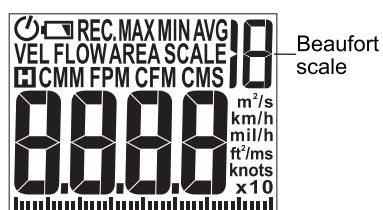
Introduction

A professional digital anemometer with stable performance, safety and reliability. It can measure air velocity, air volume, Widely used in wind energy, meteorology, industry, agriculture, hydrology and water conservancy, environmental protection, highways, airports, etc.

Air velocity flow sensor

Display
Function select
Set
Data hold
Unit select
MAX/MIN/AVG
Power

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Display

Beaufort scale

m²/s
km/h
mil/h
ft²/ms
knots
×10

symbols	description	symbols	description
H	Data hold	m/s	meter per second
MAX	Maximum value	Km/h	kilometers per hour
MIN	Minimum value	mil/h	Miles per hour
AVG	Average value	ft/m	Foot/minute
VEL	Air velocity	ft/s	Feet / sec
FLOW	Air flow	knots	nautical miles per hour
AREA	Air duct area setting	m²	Square meter
CMM	Cubic meters per minute	ft²	square foot
CMS	Cubic meters per second	🔋	Low battery
CFM	Cubic feet per minute	⏻	Automatic shutdown

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Measurement Considerations

- Do not touch the fan blade with force。
- Do not store or operate the instrument in areas with high temperature or humidity.
- In use, do not let the strong light directly shine on the fan, in order to avoid measurement errors.
- Avoid violent vibration。
- Remove the battery before storing the instrument for a long time。

Operation

Air velocity measurement

1. Power the meter by pressing the ⏻ power button, The "VEL" icon will appear in the display.
2. If the "VEL" icon disappears in the display, Press the FUNC button again until the "VEL" icon appear in the display.
3. Hand-held anemometer let the fan plane of anemometer be vertically aligned with the wind direction of the airflow.
4. View the measurement on the display

Air duct area setting

1. Power the meter by pressing the ⏻ power button, Press the SET button until the "AREA" icon appear in the

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display

2. A data bit is flickering, indicating that this value can be modified.
3. Press the REC button to set the scintillation digit to the desired value。
4. Press the UNIT button to select the next digit to be adjusted.
5. After adjusting all the digits, it will jump to the adjusting unit. The unit will flicker. Press REC button to change the unit.。
6. After setting up, press the SET button to exit the setting state and return to the airflow measurement; the set data will be automatically saved.

Airflow measurement

1. Power the meter by pressing the ⏻ power button, The "VEL" icon will appear in the display
2. Press the FUNC button again, the "FLOW" icon will appear in the display
3. Hand-held anemometer let the fan plane of anemometer be vertically aligned with the wind direction of the airflow.
4. View the measurement on the display

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Note: To measure the airflow, the cross-sectional area of the tested air duct must be determined and input into the anemometer.

Data hold

To freeze a displayed reading, press the 🔘 button. The "H" icon will appear and the most recent reading will appear in the display. Press the 🔘 button to exit the mode and return to normal operation

MAX/MIN/AVG function

1. Press the REC button once to put the meter in MAX/MIN/AVG mode. The meter will now display the highest reading that occurs while the function is enabled. The "MAX" icon will appear in the display.
2. Press the REC button again to display the lowest reading that occurs while the function is enabled. The "MIN" icon will appear in the display.
3. Press the REC button again to display the average reading that occurs while the function is enabled. The "AVG" icon will appear in the display.

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4. Press REC again to toggle between the MAX 、 MIN and AVG readings.
5. To exit the MAX/MIN/AVG mode and return to the normal real time display, press and hold the REC button (2 seconds).

Units of measure

Air velocity unit selection

Press the UNIT button to select unit(m/s、km/h、mill/h、ft/m、ft/s、knots),when measuring air velocity.

Airflow unit selection

Press the UNIT button to select unit(CMS 、 CMM 、 CFM),when measuring airflow.

Meter Power and Automatic Power Off

1. Press the ⏻ button to turn the meter on.
2. Press the ⏻ button again to turn the meter off.
3. The meter has an automatic power off feature that conserves battery energy. After 10 minutes the meter automatically shuts off.
4. To press and hold the 🔘 button to turn the meter on, the

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auto power off function will be cancelled. And the ⏻ icon disappears.

Specifications

Display	LCD, Max display 9999
Air velocity	0.40 ~ 30.00 m/s
Sampling rate	Approx. One reading per second
Sensor	Air velocity/flow sensor: angled vane arms with bearing
Beaufort Wind scale	0~12
Max/Min/Avg	Record and view minimum, maximum, average
Data hold	Freeze reading
Operating conditions	Temperature:0~40°C，Humidity:<80%RH Altitude :<2000m
Storage conditions	Temperature:-10~50°C，Humidity:<80%RH
Auto power off	10 minutes
Power	3 x 1.5VAAA(LR03) batteries

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Accuracy Specifications

The accuracy applies within one year after the calibration. Reference condition: the environment temperature 18°C to 28°C, the relative humidity is no more than 80%,

Air Velocity Measurements	Range	Resolution	Accuracy
m/s (meters per second)	0.40~30.00	0.01	±(2.0%+ 0.5m/s)
km/h (kilometers per hour)	1.40~108.0	0.01~0.1	±(2.0%+ 1.8km/h)
ft/s (feet per second)	1.30 ~ 98.50	0.01	±(2.0%+ 1.6ft/s)
ft/m (feet per minute)	78 .00~ 5900	0.01~1	±(2.0%+ 10ft/m)
knots (nautical miles per hour)	0.80~ 58.30	0.01	±(2.0%+ 1.0knots)
mile/h(miles per hour)	0.90 ~ 67.10	0.01	±(2.0%+ 1.1mile/h)

Air Flow Measurements	Range	Resolution	Area
CFM (cubic feet per minute)	0~9999	0.01 to 1	0 - 9.999
CMM (cubic meters per minute)	0~9999	0.01 to 1	0 - 9.999
CMS (cubic meters per second)	0~9999	0.01 to 1	0 - 9.999

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Maintenance

Battery Replacement

When the battery voltage is low the '🔋' symbol will appear on the display.

Replace the three (3) 1.5 'AAA' batteries by removing the rear (center) battery compartment screw and accessing the battery compartment. Observe polarity when placing the batteries in the compartment. Ensure that the compartment cover is securely fastened when finished.

Cleaning and storage

⚠ **Caution**

To avoid damaging the instrument housing, do not use corrosive or solvent to clean the instrument.

Periodically wipe the case with a damp cloth and mild detergent; do not use abrasives or solvents.

Store the meter in an area with moderate temperature and humidity (refer to the operating and storage range in the specifications chart earlier in this manual).

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EMC&LVD RoHS CE 🗑

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新版本显示屏更改旧版本显示屏 20190909

75X105mm