USER'S MANUAL

M101040078

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Digital anemometer



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120*90mm

Safety information

This instrument is a professional high-precision digital anemometer, which can measure wind velocity, wind flow, wind force, wind temperature, humidity, dew-point temperature and wet-bulb temperature, and is widely used in wind energy, meteorology, industry, navigation, environmental protection, fan manufacturing and ventilation engineering.

WB Wet-bulb Temperature: refers to the lowest temperature that can be achieved only by evaporating water in the current environment.

DP Dew-point Temperature: refers to the temperature at which the air is cooled to saturation under the condition that the water vapor content in the air is constant and the air pressure is kept constant.

1.Safety information

Before operating or maintaining this instrument, please read the following safety information carefully and use the instrument according to the operating instructions, otherwise it may be damaged.

1.1 Preparation

1.After receiving the instrument, please check whether it is damaged during transportation.

2.If the instrument is stored and shipped in harsh environment, please check and confirm whether the instrument is damaged.

1.2 How to use

1.The instrument shall be operated within the specified ambient temperature and humidity range.

2.If any abnormality or failure is found, please stop using the instrument.

Description

3.Do not store or use the instrument in direct sunlight, and high temperature and humidity.

4.Do not touch the fan blades with excessive force.

5.Please do not let strong light directly shine on the fan, so as not to affect the measurement accuracy.

1.3 Symbols

CE	Comply with relevant EU laws and regulations.
⚠	Important safety information

1.4 Maintenance

1.Repair or maintenance should be carried out by professionally trained personnel.

2.If there is dust on the fan blade, please blow it off with clean air or wipe it with a wet clean soft cloth. Do not use abrasives or solvents.

3.If the instrument is not used for a long time, the battery should be taken out to prevent the battery from leaking.

2. Description

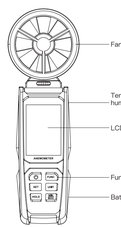
— This instrument is a digital anemometer, which is used to measure the velocity of wind and the wind flow in the corresponding area.

— This instrument is a portable and professional measuring instrument with large display screen, backlight, multiple unit switching and other functions.

— This instrument has reading hold, maximum and minimum value hold, automatic shutdown and battery undervoltage indication.

Components

2.1Components



Display

2.2 Display



Symbol	Description	Symbol	Description
SLOW	low	knots	Knots
FAST	tall	DP	Dew-point temperature
	Simulated bar	WB	Wet-bulb temperature
LEVEL	Wind level	CMM	Cubic meters per minute
MIN	Minimum value hold	CFM	Cubic feet per minute
MAX	Maximum value hold	FPM	Feet per minute
HOLD	Data hold	CMS	Cubic meters per second
VEL	Wind velocity measurement	℃	Degree Celsius
FLOW	Wind flow measurement	℉	Fahrenheit
AREA	Wind flow area setting	%	Percentage
㎡	Square meter		Temperature
㎡	Square feet		Humidity
m/s	Metre per second		Automatic shutdown symbol
ft/m	Feet per minute		Battery undervoltage indication
km/h	Kilometer per hour		

Specifications

3.Specifications

Operation altitude	Maximum 2000m
Operation mode	Wind speed frequency conversion
show	LCD
Maximum display	nine thousand nine hundred ninety nine
Sampling rate	About 0.4 seconds
Automatic shut-down	About 15 minutes
Battery undervoltage indication	The LCD displays the symbol.
Operation current	About 40mA
Power Supply	1.5V×3 AAA
Resolution ratio	0.01m/s、0.1℃、1%RH
Ambient temperature	-20℃~60℃/-1.0℃ -4℉~140℉/-2.0℉
Dew-point temperature	-50℃~60℃ -58℉~140℉
Wet-bulb temperature	-20℃~60℃ -4℉~140℉
Humidity	0～99% RH(5% RH (no condensation for environment change)
Size	252mm×84mm×33mm
Weight	About 210g (batteries excluded)

Technical indicators

4.Technical indicators

Ambient temperature: 23℃±5℃/relative humidity < 70%.

4.1 M/s

Measuring range	Resolution ratio	Accuracy
0.80~40.00m/s	0.01m/s	±(2.0% reading +50 digits)

4.2 Km/h

Measuring range	Resolution ratio	Accuracy
2.88~108.00km/h	0.01km/h	±(2.0% reading +50 digits)
108.0~144.0km/h	0.1km/h	

4.3 Ft/s

Measuring range	Resolution ratio	Accuracy
2.62~131.2ft/s	0.01ft/s	±(2.0% reading +50 digits)

4.4 Knots

Measuring range	Resolution ratio	Accuracy
1.6~77.7Oknots	0.01knots	±(2.0% reading +50 digits)

4.5 Mile/h

Measuring range	Resolution ratio	Accuracy
1.8~90.00mile/h	0.01mile/h	±(2.0% reading +5 digits)

Keys

4.6 Ft/m

Measuring range	Resolution ratio	Accuracy
157.5~7874ft/m	1ft/m	±(2.0% reading +5 digits)

4.7 Wind flow unit

Unit	Range	Area
CMM	0~999.9	0~9.999m²
CFM	0~999.9	0~9.999ft²
CMS	0~99.99	0~9.999m²

5. Keys

Symbols	Description
SET	Set
UNIT	Unit selection key
FUNC	Function selection key
HOLD	Data hold
MAX/MIN	Maximum/minimum lock
	Power key

Operation guide

6.Operation guide

6.1 Power on and off:

Long press the power button to turn the unit on, and short press the power button to turn it off.

6.2 HOLD data hold:

Short press the HOLD key to display the HOLD symbol. And the measurement data is locked. Short press the HOLD key again to unlock it.

6.3 MAX maximum and MIN minimum value hold :

Short press the MAX/MIN key to lock the maximum or minimum measurement data (MAX → MIN → unlock) during the measurement.

6.4 UNIT wind velocity measurement unit conversion:

Short press the UNIT key to select the required measurement unit (m/s → ft/m → km/h → mile/h → knots).

6.5 SET temperature setting key:

①、Short press the SET key for selection (ambient temperature → DP → WB).

②、Long press the FUNC key to select ℃/℉ (only valid for this startup). And the default settings are restored after shutdown.

③ Press the UNIT key-( ) key to start the machine when it is turned off, which can lock the switch between℃ and ℉. The settings are reset after repeated operation.

Operation guide

6.6 FUNC area setting:

①.To measure the air flow, please first determine the area of the air duct to be measured.

②、Short press the FUNC key, "AREA" will be displayed on the screen and the flashing number indicates that it is adjustable. Short press the UNIT key short for adjustment. After setting the required value, short press the MAX key to shift to the unit selection (㎡/ft²), short press the MAX key again to confirm the setting, and the buzzer sounds long to indicate that the setting is complete (repeat the operation to change the area setting).

6.7 Wind flow measurement:

Place the instrument (fan) in the detection environment, short press the FUNC key to switch to the FLOW wind flow measurement mode, and short press the UNIT key to switch to the required measurement unit (CMM → CFM → CMS) .

6.8 Wind level measurement:

Short press the FUNC key to select the LEVEL wind level measurement mode, and the screen displays the currently measured wind level.

6.9 Cancel the automatic shutdown：

Press the FUNC key and ( ) key to start the unit and the automatic shutdown function is cancelled. The automatic shutdown function is resumed after manual shutdown.

Battery replacement

7.Battery replacement

①. Turn off the power supply.

②. Use a screwdriver to remove the battery cover screw on the back.

③. Remove the battery cover.

④. Dismantle the old battery.

⑤. Replace with new 1.5X3AAA batteries.

⑥. Install the battery cover and tighten the fixing screws.



Accessories:

① A digital anemometer,	1 unit
② 1.5V×3 AAA batteries,	3 sections
③ An instruction manual,	1 book
④ A cloth bag.	1 unit