Mini Anemometer HK820+
User's Manual

1．Safety ⚠

Read the following safety information carefully before attempting to operate or service the meter. Use the meter only as specified in this manual; otherwise, the protection provided by the meter may be impaired.

Operating conditions:

1. RH < 80RH % (Non-condensation)

2. Temperature: 0°C -40°C

3. Below the height of 2000 meters

Safety symbol:

CE Comply with EMC

2. Introduction

Based on the high-speed and high-precision MCU calculation. this anemometer can provide fast and high accuracy measuring. It is designed for air velocity and temperature measuring project, quality control illness prevention and cure and all kinds of environmental air velocity and temperature measurement. It is widely used for the air velocity and temperature measurement at constructional-engineering, factory, school, public transport, etc.

3. Specifications

Function	Range	Accuracy
Air Velocity Range	0.4~30.0m/s	±(3.0%+0.3m/s)
	1.4～108km/H	±(3.0%+1.0km/H)
	0.9~67.0MPH	±(3.0%+0.4MPH)
	0.8～58.0knots	±(3.0%+0.4knots)
	80~5900ft/min	±(3.0%+40ft/min)
Air Velocity Grade	0~12	±1
Temperature Range	0°C～60°C	±1.5°C
	32°F～140°F	±2.7°F
Air Volume measurement	CMM/0~9999	
	CFM/0~9999	
Display	4-digit LCD display, max.display "9999"	
Resolution	0.1	
Sampling rate	0.5 sec.	
Sensor type	Magnetic induction wind speed sensor and negative temperature coefficient temperature sensor	
Backlight	Yes	
Enable auto power off	The meter shuts off automatically after 15 minutes inactivity under auto power off mode	
Operating conditions	0°C～ 40°C, 10RH%～80RH%	
Storage conditions	-10°C～60°C, 10RH%～ 70RH%	
Power supply	3*1.5V "AAA" batteries	
Dimensions	154*59*30mm	
Weight	108g (include batteries)	

4. Meter description

1) Vane sensor

2) LCD display

3) Units button

A. In the air velocity measurement briefly press "UNITS" button, the unit icon shits according the cycle "m/s→ft/m→mph→km/h→knots".

B. In the air volume measurement briefly press "UNITS" button, the unit icon shifts according the cycle "CMM→CFM"

4) MAX/MIN button

A. Max.value or min.value holding button

B. In the air volume measurements briefly press "MAX/MIN" button to adjust the area digit from 0~9 in secondary value display area of LCD.

5) Power On/Off button

A. Press it to power on the meter, press again to power off meter

B. In the air volume measurements briefly press "Power on/off" button to adjust the area digit value in secondary value display area of LCD. (from right to left)

6) SEL button

A. Briefly press "SEL" button to shift Air Velocity (Air Speed Scale) → Temperature → Air Volume orderly.
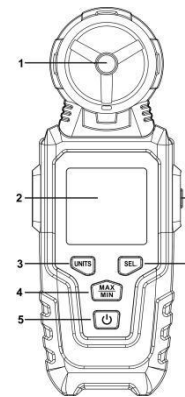

B. In the temperature measurement, press "SEL" to shift °C and °F.

7) Hold/Backlight button

Briefly press to activate data hold, press again to exit data hold function; Press this button to activate backlight function, press again to exit backlight function.

5. LCD display description

1) Data hold icon
2) CFM icon (cubic feet per minute)
3) Major numerical display area
4) Secondary numerical display area
5) CMM icon (cubic meter per minute)
6) °C and °F icon
7) Low battery icon
8) MAX/MIN icon
9) m/s icon (meter per second)
10) ft/m icon (feet per minute)
11) mph icon (mile per hour)
12) km/h icon (kilometer per hour)
13) knots icon (nautical mile per hour)
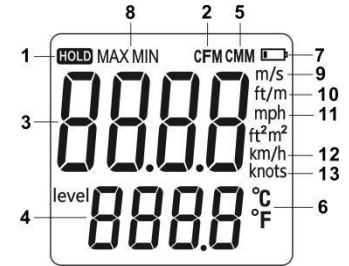
6. Operation instruction

1) Press the power on/off button to switch on the meter.

2) Press "SEL" button to shift air velocity measurement, briefly press "UNITS" button to select units of m/s→ ft/m→ mph → km/h → knots, and aim the wind speed sensor to the source of air velocity under test, the air velocity value appears in the major numerical display area

3) Read the air velocity grade in secondary numerical display area

4) Press "SEL" button to shift temperature function, briefly press "UNITS" button to select "°C" or "°F", and put the meter to the environment of under test, the value of temperature appears in the secondary numerical display area

5) Press "SEL" button to shift air volume measurement, briefly press "UNITS" to shift CMM or CFM, and press Power on/off button to adjust the values of area digit in secondary numerical display area (from right to left orderly), the selected digit is twinkling, press "MAX/MIN" button to adjust the selected digits (from 0~9 in cycle). After setting the desired area to enter air volume measurement and ready the value in major numerical display area.

NOTE:

a) The default measuring value is the air-flow cross-sectional area is 1.0 ㎡, it is needed to input real value of air-flow cross-sectional area to get the correct test result.

b) It is needed to set the air-flow cross-sectional area again after changing the unit of air volume.

7. Cleaning and Maintenance

1) Wipe the meter regularly with a moist, lint-free cloth. Do not use alcohol or solvents. Do not submerge the meter in any liquid.

2) Store the meter in a dry place away from humidity and vibrations.

3) Remove the battery when the meter is to be stored for long periods of time.

4) When the battery is low, LCD display 🔋 A new battery is needed.

5) Working in strong magnetic environment will affect the measuring accuracy.

6) This meter has already been calibrated before delivery. Do not revise the calibration parameters without professional personnel and device.

* This meter is well calibrated before delivery, and the recommended recalibration cycle is one year.