

# EM20

## Digital Anemometer



User Manual

## ■ Introduction

EM20 Digital Air Flow anemometer is designed to measure Temperature and Air Flow, simultaneously. It is normally used to measure the temperature and air speed at ventilation outlets.

## ■ Features

1. Display: the top display line shows the velocity and the bottom display shows the temperature.
2. Parameters:  
Velocity: m/s, km/h, fpm, mph, kts, Beaufort  
Temperature: °C, °F
3. Resolution:  
Velocity: 0.1m/s, fpm;  
Temperature: 0.1, °F 0.1°C
4. Range:  
Velocity: 0.4 ~ 20m/s, 80 ~ 4000fpm  
Temperature: -10 ~ 50 , 14 ~ 122

5. Accuracy:

Velocity:  $\pm$  (2% of reading + 0.3m/s)

$\pm$  (2% of reading + 60fpm)

Temperature:  $\pm 1 \pm 1.8$

6. Sample rate: 2 time /sec

7. Operating environment:

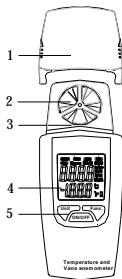
14°F to 122°F (-10°C to 50°C), 0 to 80%RH

8. Storage environment:

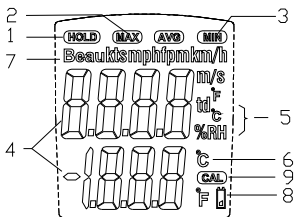
-4°F to 140°F (-20°C to 60°C), 0 to 80%RH

## ■ Instrument Description



1. Sensor cover
2. Vane sensor
3. Temperature and Humidity sensor
4. LCD display
5. Function key







## LCD A (Type A/Type B)



Symbol Designations:

Number of Order	Symbol	Functions
1		Indicating it is now in the data-holding mode
2		Indicating the display value being the maximum value(MAX)

3		Indicating the display value being the minimum value(MIN)
4		Measure values
5	%RH td °C	Humidity unit
6	°C °F	Temperature unit
7	Beau kts mph m/s km/h fpm	Velocity unit
8		Indication low power of batteries. Batteries should be replaced.
9		Indication to the calibration mode

## ■ Operating instructions

Temperature/Vane anemometer:

1. Press the **ON/OFF** key to turn the power on.
2. To guarantee correct readings: position instrument so that air flows through the vane and make sure the vane sensor is upright into the wind direction for measurement.
3. Make sure the reading stabilizes before recording the value.

## ■ Function Keys

Temperature/Vane anemometer:

### 1. **ON/OFF** key

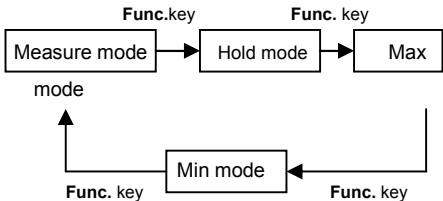
Power ON/OFF function:

Press the key to turn the power ON and press the key once more to turn the power OFF.

### 2. **Func.** key

1) Press the key to select the state of MAX、MIN、HOLD.

The cycle of views shows as following figure:



- I Hold mode: Reading is held.
- I Max mode: Maximum values since the instrument was last switched on or last reset.
- I Min mode: Minimum values since the instrument was last switched on or last reset.

## 2) Back light control

Press and hold the **Func.** key for more than 1 second. The back light will be turned on, Press and hold the key again for more than 1 second and the light will be turned off. The backlight turns off after 60 seconds.

### 3. Unit key

#### 1) Unit and Auto power off set

Velocity unit:

Press **Unit** key to change the Velocity unit. (m/s, km/s, fpm, mph, kts, Beaufort scale)

Temperature unit:

Press and hold the **Unit** key for more than 1second to change the Temperature unit. (°C, °F)

#### 2) Auto power off

The meter will power itself off after 20 minutes if there is no key operation.

To Cancel auto power off function: Press and hold the **ON/OFF** key until the LCD displays **AP ON**. Press **Unit** key to select **AP ON** or **AP OFF**, then press the **Func.** key to confirm the setting.

AP ON ---- Auto power off is active.

AP OFF -- Auto power off is inactive.

## ■. Maintenance

### 1. CLEANING INSTRUCTIONS

The meter may be wiped down with a wet


sponge or cloth using a mild, water based detergent.

**NOTE:**

This unit is not designed for complete submersion or washing in water.

**2. BATTERY REPLACEMENT**

Use the following procedure:

When the battery voltage drops below proper operation range the  symbol will appear on the LCD display and the battery needs to be replaced.

- ∞ Press the battery cover towards the arrowhead to open the battery cover.
- ∞ Replace the battery with three new AAA (1.5V) batteries.
- ∞ Replace the battery cover.

## **WARRANTY**

Sealed Unit Parts Co., Inc. warrants that it will repair or furnish without charge a similar product to replace any product which, within the specified warranty term after the date of sale by the Wholesaler, is proved to the satisfaction of Sealed Unit Parts Co., Inc. , to have been defective at the time it was sold. Said warranty is in effect only when said item is used in accordance with the instructions and recommendations of Sealed Unit Parts Co., Inc.

This warranty applies only to products which after shipment from the factory, have not been altered, changed, repaired, or treated in any manner whatsoever.

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