52235 Air Velocity / Temperature Meter
Instruction Manual

DESCRIPTION

1. On/Off Push Button
2. Data Hold Button
3. Max. Hold Button (Temp.)
4. Function Selection Switch
5. Unit selection Switch
6. Unit Symbols of Velocity
7. Unit Symbols
8. Battery Low Symbol
9. Max. Hold Symbol for Temp.
10. Data Hold Symbol
11. Error Symbol

FEATURES

- Sensitive to Low/High Air Velocity
- Temperature in ºF and ºC
- Ergonomic Design
- Easy to use
- 2" (52mm) diameter Fan Head with Extendible Cord
- Large 3 1/2 digit LCD
- Low power consumption
- Data/Max hold function
- Built-in low battery indicator

FIGURE 1

OPERATING INSTRUCTION

Measurement of Wind Velocity (refer to FIGURE 1)

1. Press the **ON/OFF** button to turn the meter ON.
2. Select meter functions by moving the function switch.
3. Select the desired units by moving the unit selection switch.
4. Determine the approximate wind direction.
5. Hold the meter so that the air flow will pass through the vane from the back to the front.
6. Wait 4 seconds for a stabilized reading.
7. For more accurate results, try to keep the axis of the vane within 20º of the wind direction.
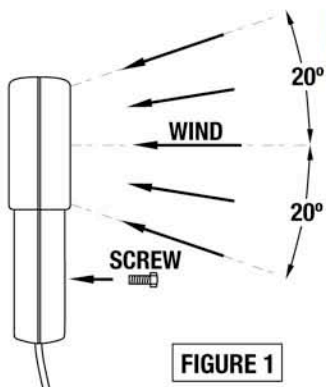
Measurement of Wind/Air Temperature

1. Press the **ON/OFF** button to turn the meter ON.
2. Select ºC or ºF by moving the function switch.
3. Let the wind pass through the vane (a thermocouple is built into the center of the vane).
4. The reading will display on the LCD.

Holding The Reading

Press the **HOLD** button to hold the reading of wind velocity or temperature.

Finding the Maximum Temperature

Press the **MAX** button, the maximum temperature measured during the measurement shall be displayed and updated on the LCD.

Range of Wind Velocity

Units	Range	Resolution	Threshold	Accuracy
m/s	0.0 -45.0	0.1	0.3	±3% ± 0.1
ft/min	0 - 8800	10	60	±3% ± 10
knots	0.0 - 88.0	0.1	0.6	±3% ± 0.1
km/hr	0.0 - 140.0	0.1	1.0	±3% ± 0.1

m/s: meter per second **Ft/min:** feet per minute
Knots: nautical miles per hour **Km/hr:** kilometers per hour

Unit Conversion Table

	m/s	ft/min	knots	Km/hr	mph
1 m/s	1	196.87	1.944	3.60	2.24
1 ft/min	0.00508	1	0.00987	0.01829	0.01138
1 knot	0.5144	101.27	1	1.8519	1.1523
1 km/hr	0.2778	54.69	0.54	1	0.6222

Range of Temperature

	Range	Resolution	Accuracy
ºC	0 – 60.0	0.1	±0.8
ºF	32.0 – 140.0	0.1	±1.5

SPECIFICATIONS

Bearing:	Sapphire jewel bearing
Temperature sensor:	K-type thermocouple
Mounting Temperature:	1/4" x 20
Operating Temperature:	Meter: 32ºF ~ 122ºF (0ºC ~ 50ºC)
	Vane: 32ºF ~ 140ºF (0ºC ~ 60ºC)
Operating Humidity:	Less than 80% RH
Operating Pressure:	500 mB ~ 2 Bar
Storage Temperature:	-40ºF ~ 140ºF (-40ºC ~ 60ºC)
Power Consumption:	Approx. 6 mA
Battery Type:	9V
Battery Life:	50 hours (for 300mA-hrs battery)

Averaging Period for Wind Speed Measurement:

m/s	0.6 sec. (approx.)
ft/min	1.2 sec. (approx.)
knots	1.2 sec. (approx.)
km/hr	2.2 sec. (approx.)

Dimension:

Meter	3.46"x6.61"x1.03"(88 x 168 x 26.2mm)
Vane	2.60"x5.22"x1.15"(66 x 132 x 29.2mm)
Weight:	12.34 oz (350g) battery included
Accessories:	Carrying case, Users manual and 9V Battery

Battery Replacement

When the low battery symbol is displayed on LCD, follow the procedures below.

1. Turn off the meter by pushing the **On/Off** button.
2. Remove the battery compartment cover.
3. Replace with a new 9V battery.

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