ET-961
Hot Wire Thermo-Anemometer
User Manual

Please read this user manual thoroughly before using this meter and store it for future reference.

Contents

1. General Description

This hot wire thermo-anemometer is ideal for low air velocity and volume measurement. The slim, plug in, telescopic hot wire probe extends from 0.26 to 1.2m (inc handle) has a probe sensor head 8.5mmØ and is ideal for grille hoods and diffusers. It is excellent for ventilation surveys, air conditioning, clean rooms, flow hoods, air balancing and environmental monitoring.

2. Features

- Can detect very low air velocity measurements
- Slim probe, ideal for grilles and diffusers.
- Combination of hot wire and standard thermistor, deliver rapid and precise measurements even at low air velocities.
- Records Maximum and Minimum readings
- Large LCD with dual display showing both air velocity and temperature simultaneously.
- Measures air velocity in m/s, km/hr, ft/min, MPH or knots
- Measures air volume in CFM (ft³/min) or CMM (m³/min)
- Measures air temperature in ℃ or℉

- Data Hold

3. Specifications

Air Velocity Measurement			
Unit	**Range**	**Resolution**	**Accuracy**
m/s	0.1~35.0 m/s	0.01m/s	(5%+1dgt) of
km/hr	0.3~122.5 km/h	0.1km/hr	readings or
ft/min	20~6889 ft/min	1ft/min	(1%+1dgt) of
MPH	0.2~78.2 MPH	0.1MPH	full scale
Knots	0.2~68 knots	0.1knots	
Temperature Measurement			
Unit	**Range**	**Resolution**	**Accuracy**
℃	0℃ ~ 50℃	0.1	±1.0℃
℉	32℉ ~ 122℉	0.1	±1.8℉
CFM/CMM Measurement			
Unit	**Range**	**Resolution**	
CFM	0 ~ 99999 ft3/min	0.001 to 100	
CMM	0 ~ 99999 m3/min	0.001 to 100	
General Specifications			
Display	55mm dual LCD display		
Sampling time	Approx 0.8sec		
Auto power off	Approx. 20 min		
Operating Temperature	0℃ ~ 50℃/32℉ ~ 122℉		
Operating Humidity	< 80%RH		

Power supply	LR61 9V battery
Weight	310g
Dimension	185×66×33mm

CFM(ft³/min)=air velocity(ft/min) x area(ft²)

CMM(m³/min)=air velocity(m/s) x area(m²) x 60

4. LCD Display Description

1. Low battery indication
2. Auto power off icon
3. Temperature units
4. Air velocity units
5. Air velocity or volume readings
6. Air volume units
7. Hold icon
8. MAX/MIN icon
9. AVG icon
10. Temperature readings
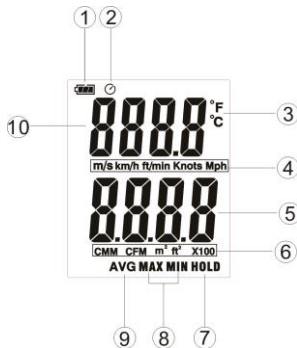
5. Meter Description

1. Probe connector
2. LCD Display
3. SET key
4. Temperature units key

4

5. Average/Up key

6. MAX/MIN key

7. Velocity units /Down key

8. Power on/off key

9. Data Hold key

10. Backlight key

11. Probe handle

12. Air velocity/temperature sensor

6. Operating Instructions

6.1. Power ON/OFF: Press ⏻ button to turn the meter on or off.

6.2. Change temperature units: Press 🔘 to select ℃ or ℉.

6.3. Area Setting: Turn the meter on, then press and hold 🔘 until "unit" appears on the LCD.

$$unit$$

m'
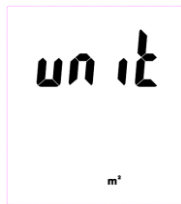
Then press 🔘 to select area unit ft² or m². After selecting the area unit, press 🔘 again , "ArEA" will appear on the LCD

```
ArEA
0001
```

Set the area values from 0.001 ~ 9999 by pressing 🔘 or 🔘. Press 🔘 to change the position of the decimal place.

6.4. **Sleep Mode On/Off**: After setting the area, press 🔘 and "SPL" will appear on the LCD display.

```
SPL
OFF
```

Press $\overset{\text{AVG}}{\triangle}$ to select ON（sleep mode on）or OFF

（sleep mode off）after selecting the sleep mode on or

off, long press $\overset{\text{SET}}{\triangledown}$ key , the meter will automatically

save the new settings and exit setting mode.

Note: The default mode is sleep mode on. In sleep mode on, the meter will automatically shut off after approximately 20 minutes of no activity. In sleep mode off, the meter will stay on continuously, until the user

turns the meter off using the power button $\textcircled{\tiny\textcircled{}}$.

6.5. **Backlight**: Press $\textcircled{\tiny\text{💡}}$ to turn the backlight on or

off.

6.6. **AVG**: Press $\overset{\text{AVG}}{\triangle}$ to enter average measuring

mode。

6.7. **MAX/MIN:** Press $\overset{\text{MAX}}{\underset{\text{MIN}}{\textcircled{}}}$ and "MAX" icon appears on

the LCD to view the current maximum reading. Press

7

(MAX MIN) again "MIN" icon will appear to view the current minimum reading.

6.8. **HOLD:** Press (HOLD) to freeze the readings on LCD display.

6.9. **Units Selection**: Press (UNITS) to select desired measuring units for air velocity or air flow area or volume.

7. Operating Procedure

7.1. Connect the hotwire probe **（ Note：Battery and power adapter cannot be used at the same time. Using them at the same time will damage the circuit board and invalidate the warranty ）**

7.2. Power on the meter by pressing the power (⚫) button.

7.3. Select the desired air velocity units and temperature units

7.4. **Zero setting**:

a) Put the sensor cover over the sensor to isolate the sensor from the environment.

b) Keep pressing the "HOLD" key for around two seconds to zero air velocity.

7.5. Take the sensor cover off and extend the telescope probe to the convenient length.

7.6. **Direction of the sensor head**: On the sensor head there is an arrow to indicate which way the probe should be used when taking a measurement. It is important that you check this, if used in the wrong direction you will receive false readings. The upper display will show the air temperature value. The lower display will show the air velocity value.

8. Accessories

1). User Manual
2). 9V battery
3). AC/DC 9V adapter
4). Hot wire sensor
5). Carry case

UK DISTRIBUTOR

ATP INSTRUMENTATION LTD
TOURNAMENT WAY
ASHBY DE LA ZOUCH
LEICESTERSHIRE
LE65 2UU

TEL 01530 566800
FAX 01530 560373

WWW.ATP-INSTRUMENTATION.CO.UK