

# AIR VELOCITY METERS

## ANEMOMETER, HYGROMETER, LIGHT METER, THERMOMETER

HHF80 Series



Optional

- ✓ Simultaneous Readings of Air Velocity and Temperature or Humidity and Temperature
- ✓ Exclusive Photo Diode and Color Correction Filter Light Sensor, Spectrum Meets C.I.E. Photopic
- ✓ Standard Type K Thermocouple SMP Input Jack Suitable for All Types of K Probes
- ✓ Lux/Feet-Candle Selectable by Pressing Button on the Front Panel

The HHF81 anemometer can measure air flow, humidity, temperature and light. The built-in microprocessor circuit assures excellent performance and accuracy. The HHF81 can track the maximum and minimum values along with current readings. The HHF81 and HHF82 display the flowrate in your choice of knots, meters per second, kilometers per hour, miles per hour, feet per minute.

The HHF81 and HHF82 rely upon a low-friction ball bearing mounted wheel design to provide high accuracy at high and low air velocity. The impeller provides excellent accuracy ( $\pm 3$  to 4%) and the ability to measure the slightest breeze (0.3 m/s). For temperature readings, the HHF81 has an internal thermistor or is compatible with any Type K thermocouple with SMP Male connector, accurate to  $\pm 1^\circ\text{C} + 1\%$  of reading. The humidity sensor measures to 95% relative using a high precision thin-film capacitance sensor with fast response to humidity changes. The Light measurement utilizes an exclusive photo diode and color correction filter light sensor.

### SPECIFICATIONS (COMMON)

#### Air Velocity

**Measurement Range:** 80 to 5910 ft/min, 0.4 to 30.0 m/s, 0.9 to 67.0 mph, 1.4 to 108.0 km/hr, 0.8 to 58.3 knots, 0.8 to 58.3 knots

**Resolution:** 1 ft/min, 0.1 m/s, 0.1 mph, 0.1 km/hr, 0.1 knots

**Accuracy:**  $\leq 20$  m/s: 3% FS,  $>20$  m/s: 4% FS

**Operational Temperature:** 0 to  $50^\circ\text{C}$  (32 to  $122^\circ\text{F}$ )

**Operational Humidity Maximum:** 80% RH

**Overrange Display:** "----"

**Battery:** 9V (included)

**Power Consumption:** Approx. dc 6.2 mA

**Weight:** 160 g (0.4 lbs) with battery

**Dimension:** 156 x 60 x 33 mm (6.14 x 2.36 x 1.29")

#### SPECIFICATIONS (HHF81)

##### Temperature (Internal Thermistor)

**Measurement Range:** 0 to  $50^\circ\text{C}$  (32 to  $122^\circ\text{F}$ )

**Resolution:**  $0.1^\circ\text{C}/^\circ\text{F}$

**Accuracy:**  $\pm 1.2^\circ\text{C}$  ( $\pm 2.5^\circ\text{F}$ )

##### Temperature (External Type K)

**Measurement Range:** -100 to  $1300^\circ\text{C}$  (-148 to  $2372^\circ\text{F}$ )



HHF82 shown smaller than actual size.

HHF81 shown smaller than actual size.

KTSS-HH thermocouple sold separately.

**Resolution:**  $0.1^\circ\text{F}/^\circ\text{C}$

**Accuracy:**  $\pm(1\% + 1^\circ\text{C})$  of rdg [ $\pm(1\% + 2^\circ\text{F})$  of rdg]

#### Humidity

**Measurement Range:** 10 to 95%

**Resolution:** 0.1%

**Accuracy:**  $< 70\%$  RH:  $\pm 4\%$  of rdg,  $\geq 70\%$  RH  $\pm (4\% \text{ rdg} + 1.2\% \text{ RH})$

#### Light Lux

**Measurement Range:** 0 to 2200 Lux, 1800 to 20000 Lux, 0 to 204.0 Fc, 170 to 2000 Fc

**Resolution:** 1 Lux, 10 Lux, 0.1 Ft-cd, 1 Ft-cd

**Accuracy:**  $\pm 5\%$  rdg  $\pm 8$  dgt

### To Order

Model No.	Description
HHF82	Air flow meter
HHF81	Anemometer, hygrometer, light meter and thermometer
KHSS-18E-RSC-12	Type K thermocouple—exposed element for air
KTSS-HH	Type K handle probe—grounded element for air or liquids
SC-HH11A	Soft carrying case
SMPW-K-M	Type K SMP male connector with write on window
MN1604	Replacement 9V battery
CAL-3-FLOW	NIST traceable 4-point calibration certificate

Comes complete with operators manual and 9V battery.

**Ordering Examples:** HHF81, 5-digit air flow meter, SC-HH11A, soft carrying case and MN1604, replacement 9V battery.

HHF82, air flow meter.