

Kestrel® 2000 Pocket Thermo Wind™ Meter

- The NK *Kestrel* 2000 Thermo-Anemometer is a pocket-sized precision instrument for measuring wind speed, temperature and wind chill.
- It's ready whenever you are - just slip off the protective case and press "ON" for fast, accurate readings of the environmental conditions that affect you most.
- The large liquid crystal display is clear and easy to read under almost any conditions.
- The Kestrel 2000 can track maximum and average wind speeds along with current readings, and can display wind speed in your choice of knots, meters per second, kilometers per hour, miles per hour, feet per minute or Beaufort scale.
- Temperature and wind chill can be displayed in °C or °F.
- Measuring modes and display units can be changed at any time and all functions are controlled with only two buttons.
- The Kestrel 2000 relies upon a precision ultralight impeller mounted on jewel bearings to measure wind speed.
- It provides excellent accuracy ($\pm 3\%$) and the ability to measure the slightest breeze (0.3 M/S).
- It is protected by a reinforced fiberglass housing and can be replaced easily and affordably should it become damaged or worn.
- For temperature readings, the Kestrel uses a fast-responding thermistor accurate to ± 1 °C.
- Wind chill is calculated from wind and temperature data using the U.S. National Weather Service's official tables.
- The Kestrel 2000 is waterproof and floats and comes with a convenient neck lanyard.
- The battery is easy to replace and provides 400 hours of use.
- The protective case prevents damage to the unit.
- Performance is guaranteed for one full year.
- Nos. 5,783,753 and 5,939,645



Shown at right is the Kestrel 2000 with cover and an optional extra removable impeller



Wind Speed Functions

Operating Modes: Moving three-second average (wind speed), average since power on (AVG) or maximum three second gust since power on (MAX).

Update: 1 second.

Units: Knots (KT), meters per second (M/S), kilometers per hour (KM/H), miles per hour (MPH), feet per minute (FPM) and Beaufort (B).

On-axis Accuracy: +/-3% of reading or +/-least significant digit, whichever is greater.

Off-axis Response: -1% @ 5 °, -2% @ 10 °, -3% @ 15 °.

Calibration Drift: <2% after 100 hours operation at 7 M/S

Minimum Speed: 0.3 M/S (~0.6 KT, 1KM/H, 0.7 MPH, 60 FPM).

Maximum Speed: 40 M/S (~78 KT, 144 KM/H, 89 MPH, 7830 FPM). (Note: Extensive operation at or near maximum speed may result in impeller bearing wear and reduced accuracy.)

Temperature and Wind Chill Functions

Operating Modes: Temperature, wind chill.

Update: 1 second.

Units: Degrees Centigrade (°C) and degrees Fahrenheit (°F).

Accuracy: +/-1°C.

Resolution: +/-0.1°C temperature, +/-0.1°C wind chill.

Other Functions

Buttons: Two sealed tactile rubber buttons control all functions.

Auto Shutdown: 30 minutes after last key press.

Battery: User-replaceable CR2032 coin cell. Typical life, 400 hours.

Environmental Specifications

Sealing: Electronics enclosure IP67 - water resistant to 1meter (3feet). Unit floats.

Shock: Drop tested to 2meters (6feet).

Operating Temperature: LCD functional temperature range, -15 °C to 50 °C (5 °F to 122 °F).

Storage Temperature: Safe storage temperature range, -20 °C to 80 °C (-4 °F to 176 °F).

Physical Specifications

Impeller: Diameter 25mm (1in.). High precision jewel bearings. User replaceable impeller assembly.

Temperature Sensor: Hermetically sealed thermistor.

Display: Reflective LCD, 9 mm (0.36 in.) digit height.

Case: Slip-on hard case protects display, buttons and impeller.

Dimensions: Unit, 122 x 42 x 14 mm (4.8 x 1.7 x 0.6 in.); case, 117 x 46 x 19 mm (4.6 x 1.8 x 0.7 in.); lanyard, 0.5 m (10 in.).

Weight: Unit, 43 grams (1.5 ounces); case, 23 grams (0.8 ounces).

Temperature Limitations

The Kestrel temperature sensor is able to measure temperatures as low as -30C (-22F) and as high as 70C (158F). The sensor and electronics simply won't measure beyond this range. The Kestrel is able to display wind chill measurements lower than -30C, depending on wind conditions. It is also able to display heat index measurements above 70C, depending on humidity conditions. Furthermore, the Kestrel display will not function if the display itself gets below -15C. However, if the unit is kept in a pack or pocket or other warm area, the display itself should not get this cold. In other words, try not to leave the Kestrel outside in temperatures below -15C.

Full one-year warranty on entire system, covering manufacturing defects.

Distributed in Canada by:

QPC Instruments Inc.