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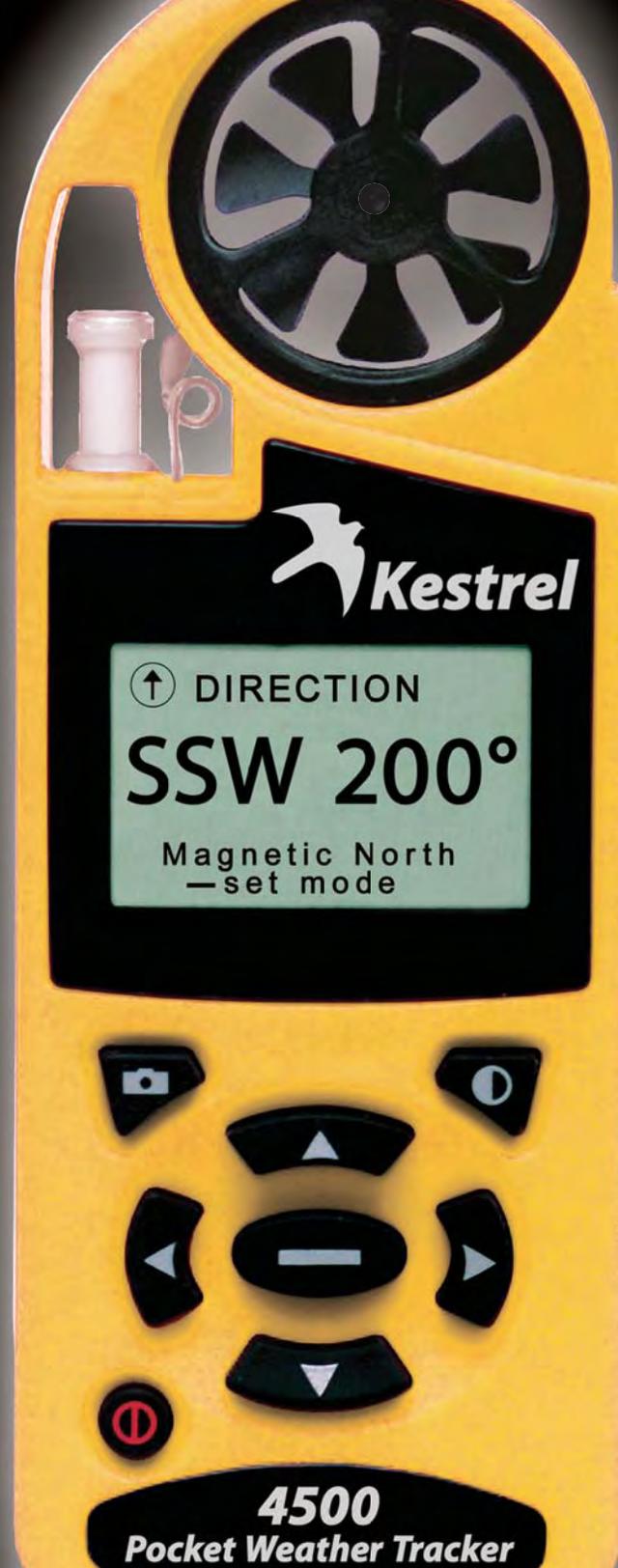
Kestrel® Pocket Weather® Meters

Link Up International

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Kestrel®

Pocket Weather® Meters

2007 Catalog

Welcome to Kestrel Pocket Weather Meters...

Kestrels are small, fast falcons that can be found all over North America. Glider pilots like them because their circling indicates the presence of thermal lift. And, since the very first Kestrel Pocket Wind Meter was designed by a glider pilot, the name seemed appropriate.

Weather instruments aren't a sideline for us - they ARE our business. We can't afford to let our customers down. You can be sure that every detail is scrutinized over and over...and over. For more than ten years now, we've been improving and adding to the Kestrel family of products. In 2007, you'll find two new Kestrels, the 4200 and the ingenious 4500, both products our customers have been asking for. You'll also find the new Kestrel Portable Vane Mount in the product lineup. This custom designed weather vane pairs perfectly with the Kestrel 4500 for a complete deployable weather station. These products have added some improvements and new features, while continuing to incorporate all the qualities that have made the Kestrels the most relied-upon field weather instruments in the world.

Kestrel Pocket Weather Meters are developed, built and supported by NK in Boothwyn, Pennsylvania. Our staff of engineers are constantly devising new technology to make our products tougher, more accurate and better performing. Owners Paul Nielsen and Richard Kellerman are committed to US manufacturing to ensure that each Kestrel Meter meets our high standards.

You might find a weather meter that is a little less expensive, but you won't find one that works better. No matter what you're using it for, you'll be able to count on your Kestrel Pocket Weather Meter to give you the information you need, day after day. We guarantee it.



All Kestrel Pocket Weather Meters are MADE IN THE USA and covered by a TWO YEAR warranty against manufacturing defects. (Batteries, calibration, user damage, and excess impeller wear are not covered under warranty. Some electronic components manufactured outside the USA.)

Kestrel Pocket Weather Meters are covered by the following US Patents:

5,783,753 (All Models)

5,939,645 (All Models except 1000)

6,257,074 (4000, 4100, 4200, 4500)

7,059,170 (3000, 3500, 4000, 4000NV, 4100, 4200, 4500, 4500NV)

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Publication date 1/1/2007. Prices and product configurations subject to change without notice.



"Kestrel Pocket Weather Meters have taken away logistical headaches for obtaining accurate on-site weather data under adverse field conditions" says Johann G. Goldammer of the The Global Fire Monitoring Center. Here they are using a Kestrel 4000 during a prescribed burn in Kruger National Park, South Africa.

Photo courtesy: Global Fire Monitoring Center, AfriFireNet

Which Kestrel is Best for You?



Available Functions	Kestrel 1000 Pocket Wind Meter \$89.00	Kestrel 2000 Pocket Weather Meter \$119.00	Kestrel 2500 Pocket Weather Meter \$199.00/\$209 NV	Kestrel 3000 Pocket Weather Meter \$179.00	Kestrel 3500 Pocket Weather Meter \$249.00/\$259 NV	Kestrel 4000 Pocket Weather Tracker \$329.00/\$349 NV	Kestrel 4100 Pocket Air Flow Tracker \$299.00	Kestrel 4200 Pocket Air Flow Tracker \$349.00	Kestrel 4500 Pocket Weather Meter \$399.00/\$419 NV
Current Wind Speed	✓	✓	✓	✓	✓	✓	✓	✓	✓
Max Wind Gust	✓	✓	✓	✓	✓	✓	✓	✓	✓
Average Wind Speed	✓	✓	✓	✓	✓	✓	✓	✓	✓
Air Flow							✓	✓	
Temperature		✓	✓	✓	✓	✓	✓	✓	✓
Wind Chill		✓	✓	✓	✓	✓	✓	✓	✓
Relative Humidity				✓	✓	✓	✓	✓	✓
Humidity Ratio								✓	
Heat Stress Index				✓	✓	✓	✓	✓	✓
Dewpoint Temp				✓	✓	✓	✓	✓	✓
Wet Bulb Temp					✓	✓	✓	✓	✓
Barometric Pressure			✓		✓	✓		✓	✓
Altitude			✓		✓	✓		✓	✓
Density Altitude						✓		✓	✓
Digital Compass									✓
Wind Direction									✓
Crosswind									✓
Headwind/Tailwind									✓
Backlit Display		✓	✓	✓	✓	✓	✓	✓	✓
Pressure Trend			✓		✓	✓		✓	✓
Data Storage & Charting						✓	✓	✓	✓
Data Upload						✓	✓	✓	✓
Clock			✓		✓	✓	✓	✓	✓
NV Model Available			✓		✓	✓			✓

Kestrel[®] 1000

Pocket Wind[®] Meter

Here's the one that started it all! We developed the Kestrel 1000 Pocket Wind Meter in 1995 when NK co-owner, Richard Kellerman, needed a reliable wind meter for flying his glider. Over 10 years later, it looks a little slicker, and it still gives you the reliable, accurate wind measurements that you need. The large impeller turns in the faintest of breezes and is easily replaced. The hard cover lets you throw the Kestrel 1000 into your pack without damage.

Measurements
 Current Wind Speed
 Average Wind Speed
 Maximum Wind Gust

Features
 Waterproof & Floats
 Hold Function
 User-Replaceable Impeller

Includes
 Slip-On Protective Cover
 Neck Lanyard
 Battery - CR2032 Coin Cell



actual size

"I fly model planes and checking the wind is important. The Kestrel 1000 is a reliable device that continues to attract positive attention wherever I use it. We've compared it favorably to other brands costing far more. I highly recommend it to anyone who wants a quick, convenient and reliable read on the wind."

- Tom Polk, Farmington Hills, MI



MSRP \$89
Part No. 0810

Kestrel[®] 2000

Pocket Weather[®] Meter

For those of you who like to know just how cold and windy it really is, the Kestrel 2000 Pocket Weather Meter is your reality check. Whether planning your shot, or checking to see how low the wind chill can go, the Kestrel 2000 is the easy-to-use tool you need. Thanks to the external temperature sensor, the Kestrel 2000 can take accurate water and snow temperature readings too. The backlight lets you check the temperature in your tent, without finding your flashlight. Like all Kestrel meters, it's fully waterproof and it floats.

Measurements
 Wind Chill
 Air Temperature
 Water Temperature
 Snow Temperature
 Current Wind Speed
 Average Wind Speed
 Maximum Wind Gust

Features
 Backlight
 Waterproof & Floats
 Hold Function
 User-Replaceable Impeller
 External Temperature Sensor

Includes
 Slip-On Protective Cover
 Neck Lanyard
 Battery - CR2032 Coin Cell



actual size

Kestrels were on the slopes at the 2006 ESPN X Games in Aspen, Colorado. Used to report current weather conditions, Kestrel Meters kept riders and spectators abreast of the weather information they needed.



MSRP \$119
Part No. 0820

Kestrel® 2500

Pocket Weather® Meter



actual size

The Kestrel 2500 takes the great features of the Kestrel 2000 and adds in a pressure sensor. A three-hour pressure trend indicator helps you predict fish and wildlife activity and know when the weather's going to turn nasty. With its easy-to-use digital pressure altimeter, you have the perfect instrument for any outdoor activity.

Measurements

Barometric Pressure
Pressure Trend
Altitude
Wind Chill
Air Temperature
Water Temperature
Snow Temperature
Current Wind Speed
Average Wind Speed
Maximum Wind Gust

Features

Clock
Backlight
Waterproof & Floats
Hold Function
User-Replaceable Impeller
External Temperature Sensor

Includes

Slip-On Protective Cover
Neck Lanyard
Battery - CR 2032 Coin Cell

See the Kestrel NV page for the Olive Drab Kestrel 2500 with red backlight.

"The Kestrel pocket weather meter is essential for target rifle shooting. It helps me win matches, and I rely on it for accurate weather information."

- Lones Wigger, USA National and Olympic Rifle Champion Shooter



MSRP \$199
Part No. 0825

Kestrel® 3000

Pocket Weather® Meter



actual size

NK was the first to provide accurate relative humidity measurements from a hand-held weather meter, and the Kestrel 3000 has since become practically required equipment for wildland firefighters. We've improved the humidity response speed for greater accuracy in changing conditions, and with the Heat Stress Index and Wet Bulb readings from the Kestrel 3000, you'll have environmental information to let you know when conditions become unhealthy for strenuous exercise.

Measurements

Relative Humidity
Dewpoint
Heat Stress Index
Wind Chill
Air Temperature
Water Temperature
Snow Temperature
Current Wind Speed
Average Wind Speed
Maximum Wind Gust

Features

Backlight
Waterproof & Floats
Hold Function
User-Replaceable Impeller
External Temperature Sensor
Patented Quick-Response RH Sensor

Includes

Slip-On Protective Cover
Neck Lanyard
Battery - CR2032 Coin Cell

One of the key reasons that concrete cracks is that weather conditions cause excessive moisture loss right after the concrete is placed. To successfully place concrete crack-free, the concrete's temperature, along with the air temperature, wind velocity and humidity must be monitored. The Kestrel 3000 is the perfect tool! It was used by The American Concrete Industry (ACI) on their 2006 trip to Algeria for the inauguration of the Algerian Chapter of the ACI.



MSRP \$179
Part No. 0830

Kestrel® 3500

Pocket Weather® Meter

Many Kestrel users need to know everything that the weather is doing, but don't need to log the data. We developed the Kestrel 3500 just for them. It provides comprehensive environmental data on nine different measurements with the simplicity of the Kestrel 1000. Simply turn it on and scroll left and right to see exactly what the environment is doing - in addition to the current weather readings, you'll be prepared for rapid weather changes with the three-hour barometric pressure trend. When you're done, slip on the hard cover and your Kestrel 3500 Pocket Weather Meter is just about indestructible.

Measurements

Barometric Pressure
 Pressure Trend
 Altitude
 Relative Humidity
 Heat Stress Index
 Dewpoint
 Wet Bulb Temperature
 Wind Chill
 Air Temperature
 Water Temperature
 Snow Temperature
 Current Wind Speed
 Average Wind Speed
 Maximum Wind Gust

Features

Clock
 Backlight
 Waterproof & Floats
 Hold Function
 User-Replaceable Impeller
 External Temperature Sensor

Includes

Slip-On Protective Cover
 Neck Lanyard
 Battery - CR2032 Coin Cell

See the Kestrel NV page for the Olive Drab Kestrel 3500 with red backlight.



actual size

Playing golf in 115 degree weather here in Phoenix is possible if one does two things: hydrate-hydrate-hydrate, and keep a close eye on the heat index. The portability of the 3500, its reliability and its accuracy are all direct contributors to that preparation. As a life-long "weather geek" this product receives my highest recommendation.

- Bill Putnam, Rear Admiral, USN (Ret.), Phoenix, Arizona



**MSRP \$249
 Part No. 0835**

Kestrel® NV



Measurements and Features are the same as the Kestrel 2500, 3500, 4000 and 4500.

"Accuracy counts when lives are on the line. Don't trust a look-alike. The Kestrel 4000NV is the ONLY choice when mission success or failure requires accurate weather data."

- S.W.A.T 2006 Buyer's Guide

**2500 NV MSRP \$209
 Part No. 0825NV**

**3500 NV MSRP \$259
 Part No. 0835NV**

**4000 NV MSRP \$349
 Part No. 0840NV**

**4500 NV MSRP \$419
 Part No. 0845NV**

With so many military personnel using Kestrel Meters, we developed the NV line just for them. Olive drab in color - to make them less visible, and with a visible red backlight - which helps protect the user's natural night vision.

Military personnel and pilots flying in darkness are often concerned with preserving their night vision. It takes 30 to 45 minutes for the average eye to adapt to darkness and maximize night vision. Even a short burst of white, yellow, green or blue light "bleaches out" the rod cell photoreceptors in the eye and causes night blindness until the entire adaptation process can take place again.

Light in the red spectrum does not cause this "bleaching out," preventing night blindness and night vision fatigue. This unit's red backlight is also much dimmer than a standard backlight, making it more difficult to detect with the naked eye in night operations.

Kestrel® 4000 Series

In 2000, we introduced the Kestrel 4000 Pocket Weather Tracker, and today it is still the most comprehensive hand-held weather device on the market. Since its introduction, the 4000 series has expanded to include numerous customer-requested features not previously available in a hand-held meter.

The Kestrel 4000 series is unparalleled in its ease of use and totally customizable navigation and data display. In addition to measuring current environmental conditions, all models also track and store up to 2000 data points for each parameter so you can see what's happened in the past and forecast what's coming. With both automatic and manual data storage, the extensive data log can store the exact information that you need. Current conditions along with minimum, maximum and average values can be viewed, and stored data is charted on-screen with the date and time. You can even upload the stored information to your computer for use with dozens of applications.

Kestrel 4000 models have been put to the test in some of the harshest conditions on the planet. U.S. Special Forces, combat weather teams, wildland firefighters, smoke jumpers, Mt. Everest expeditions and IRL pit crews are just a few who rely on a Kestrel 4000 model to provide them with the crucial environmental data they need. And, watch the Weather Channel during a hurricane, and you're sure to spot a Kestrel 4000 being wielded by an intrepid on-screen meteorologist.

If you need to see and track environmental conditions for your work or play, there's no better companion than the affordable, pocket-sized Kestrel 4000.

Mountain Rescue Association (MRA) was established in 1958 at Timberline Lodge at Mount Hood, Oregon and is the oldest Search and Rescue association in the United States.

The MRA is a non-profit organization with over 90 government authorized units in around the world, and has grown into the critical mountain search and rescue resource in the United States, performing over 4000 search and rescue missions per year.

The Kestrel 4000 is a critical piece of equipment for search and rescue teams across the country, and have been in packs of MRA members for years.



Kestrel® 4000 Pocket Weather® Tracker

The Kestrel 4000 raised the bar to a new level when it comes to portable conditions monitoring. For just under 4 ounces, you get every environmental reading with the press of a single button. Durable? You bet. The 4000 has been subjected to impact, water submersion and extreme temperature tests, and keeps on working. Just ask the US Military - the Kestrel 4000 is on the "most wanted" for armed forces personnel in many different specialties.

Due to popular demand in a range of applications, the Kestrel 4000 is available in Gray, Olive Drab and Safety Orange. It's also available in the NV configuration - see the Kestrel NV page for the Olive Drab Kestrel 4000 with tactical red backlight.



The Kestrel 4000 was in action at the 2006 Turin Olympics as an official sponsor of the U.S. Biathlon Team. The athletes used them for the shooting portion of their event, and their wax techs wouldn't be caught without them - conditions such as humidity, temperature, and wind are crucial parameters to ensure proper waxing.

"The Kestrel 4000 has been a great help! It has the absolutely perfect precision needed to tell us the exact parameters. The best option is the memory function to see how conditions like humidity, temp, and wind change each day and what this means for wax and ski picking!"

*- Bernd Eisenbichler,
Head-Technician USA-Biathlon*

Measurements

- Altitude
- Pressure Trend
- Barometric Pressure
- Relative Humidity
- Heat Stress Index
- Dewpoint
- Wet Bulb Temperature
- Density Altitude
- Wind Chill
- Air Temperature
- Water Temperature
- Snow Temperature
- Current Wind Speed
- Average Wind Speed
- Maximum Wind Gust

Features

- Waterproof & Floats
- Automatic & Manual Data Storage
- Data Upload (with optional interface)
- Customizable Data Storage - 2000 data points
- Minimum, Maximum & Average Values
- Backlit Display
- Data Charting
- Five Languages- English, French, Spanish, German & Italian
- User-Replaceable Impeller
- Flip-Top Impeller Cover

Includes

- Soft Carry Pouch
- Wrist & Neck Lanyards
- Batteries - 2 AAA



**Gray MSRP \$329
Part No. 0840GRY**

**Orange MSRP \$329
Part No. 0840ORA**

**OD MSRP \$329
Part No. 0840OLV**

Kestrel® 4100

Pocket Air Flow Tracker

CFM without a calculator? The Kestrel 4100 Pocket Air Flow Tracker makes it possible. For immediate and accurate air flow readings, simply enter the duct shape and dimensions, hold the 4100 in the air flow and the volume air flow readings are displayed ... no calculator required!

The Kestrel 4100 also measures temperature, relative humidity and dewpoint, either ambient or in any accessible airflow. This versatile instrument features a powerful data logger that records 2000 sets of measurements at user-selectable time intervals (over 2 years of data can be recorded). You may review the logged data with the 4100's on-screen graphing capabilities, or upload the data to a PC for in-depth review. The Kestrel 4100 is an affordable tool that is easy to carry and use and is perfect for facilities managers, HVAC equipment sales people, field installers and technicians.

Measurements

- Current Air Velocity
- Average Air Velocity
- Maximum Air Velocity
- Volume Air Flow
- Relative Humidity
- Heat Stress Index
- Dewpoint
- Temperature

Includes

- Soft Carry Pouch
- Wrist & Neck Lanyards
- Batteries - 2 AAA

Features

- Waterproof & Floats
- Automatic & Manual Data Storage
- Data Upload (with optional interface)
- Customizable Data Storage - 2000 data points
- Minimum, Maximum & Average Values
- Backlit Display
- Data Charting
- Five Languages- English, French, Spanish, German & Italian
- User-Replaceable Impeller
- Flip-Top Impeller Cover



Belt-Clip Carry Pouch Also Available

MSRP \$299
Part No. 0841

Kestrel® 4200

Pocket Air Flow Tracker

New for 2007, the Kestrel 4200 has made HVAC technicians jobs even easier with automatic humidity ratio readings. Of particular interest to dehumidification professionals, the Kestrel 4200 measures relative humidity and calculates dewpoint, wet bulb temperature and heat stress index as well as the humidity ratio - and the patented dual chamber humidity sensor assures fast and accurate readings in any environment.

Like the 4100, the Kestrel 4200 has taken the calculations and guess-work out of Air Flow measurements with automatic air flow readings. Plus it measures every other environmental parameter and stores over two years worth of information in its built-in data logger. With on-screen customization, the 4200 can truly be personalized for every technician. Easy set-up screens allow unit to display only relevant readings, and hide screens not relative to the job.

Measurements

- Humidity Ratio
- Relative Humidity
- Current Air Velocity
- Average Air Velocity
- Max Air Velocity
- Air Flow
- Temperature
- Barometric Pressure
- Dewpoint
- Wet Bulb Temp
- Altitude
- Heat Stress Index
- Density Altitude
- Wind Chill

Includes

- Soft Carry Pouch
- Wrist & Neck Lanyards
- Batteries - 2 AAA

Features

- Waterproof & Floats
- Automatic & Manual Data Storage
- Data Upload (with optional interface)
- Customizable Data Storage - 2000 data points
- Minimum, Maximum & Average Values
- Backlit Display
- Data Charting
- Five Languages- English, French, Spanish, German & Italian
- User-Replaceable Impeller
- Flip-Top Impeller Cover



Belt-Clip Carry Pouch Also Available

MSRP \$349
Part No. 0842

I found the Kestrel Pocket Air Flow Tracker to be the perfect solution to taking the many measurements we often need. Having CFM with temperature and relative humidity in such a small package is great! I recently used it on one of my jobs to demonstrate that the air balance had not been done properly, confirming that this was the cause of the occupant's discomfort, not my control system. My name and reputation was cleared... thank you Kestrel!

- Warren Wilber
HVAC Professional, New Bern, NC

Kestrel[®] 4500

Pocket Weather[®] Tracker



For years our customers have been asking for wind direction along with wind speed. New for 2007, the Kestrel 4500 does just that with its built in digital compass. But it doesn't stop there. It also calculates crosswind and headwind/tailwind with reference to a user-set target heading, and stores the information along with all the other environmental readings in its 2000 data point memory.

Pair the 4500 with the Kestrel Vane Mount and you have a data-logging weather station that sets up in seconds and rotates in the slightest of breezes. Did we mention that the whole kit is the ultimate in portability? It packs down into a 2 x 6 inch pouch and weighs under 8 ounces.

The Kestrel 4500 is also available in the NV configuration.

Measurements

- Heading (True & Magnetic)
- Wind Direction
- Crosswind
- Headwind/Tailwind
- Altitude
- Pressure Trend
- Barometric Pressure
- Relative Humidity
- Heat Stress Index
- Dewpoint
- Wet Bulb Temperature
- Density Altitude
- Wind Chill
- Air Temperature
- Water Temperature
- Snow Temperature
- Current Wind Speed
- Average Wind Speed
- Maximum Wind Gust

Features

- Waterproof & Floats
- Automatic & Manual Data Storage
- Data Upload (with optional interface)
- Customizable Data Storage - 2000 data points
- Minimum, Maximum & Average Values
- Backlit Display
- Data Charting
- Five Languages- English, French, Spanish, German & Italian
- User-Replaceable Impeller
- Flip-Top Impeller Cover

Includes

- Soft Carry Pouch
- Wrist & Neck Lanyards
- Batteries - 2 AAA



MSRP \$399
Part No. 0845

First responders use their Kestrel 4500 to gather the weather data they need within seconds of arriving at the scene. M/Cpl. Adam Ringle, from the Wilmington Police Department's Special Operations Division relies on his Kestrel 4500 to protect civilians in times of crisis-

"The Kestrel 4500 is an excellent, user friendly device that provides instant weather data to guide our Explosives Ordnance Disposal (EOD), HAZMAT, and crisis management teams rehabilitation efforts at various types of incidents. It is a 'must-have' for determining weather trends at long incidents!"

Kestrel[®] Mounts

Extend the functionality of your Kestrel Meter with a mount...

Kestrel Portable Vane Mount

The Kestrel Portable Vane Mount is an ingeniously simple accessory designed for extreme light weight and portability. The Vane Mount assembles in seconds and the precision pivot and lightweight vane extension allows the unit to spin freely in the slightest of breezes. The incorporated level ensures that the Vane Mount is installed correctly and that direction readings will be accurate. Paired with the Kestrel's 2000 data-point memory log, extensive data can be collected including wind speed and direction.

Together, the Kestrel 4500 and Vane Mount weigh less than 8 ounces (227 g.) and pack into a compact 2 x 6 inch (5 x 15.25 cm) case. The Vane Mount can be affixed to any tripod or the Kestrel Lightweight Monopod for a complete weather station you can easily pack into remote locations.



MSRP \$59*
Part No. 0791
** Preliminary Price*



Kestrel Lightweight Monopod

The Kestrel Monopod is a support base for the Kestrel Vane Mount designed for users who require extreme light weight and compact size for their weather station. Four carbon fiber poles slip-fit together to extend to 6 feet (1.8 m), and sturdy parachute cord guy lines allow use of tent stakes, sand bags, rocks or other natural materials to create a strong and stable measurement platform. Adjustable top with standard 1/4-20 tripod mount makes it easy to reference the Vane Mount bubble level to fine-tune the setup and ensure accurate performance. Packs down to 2 x 22 inches (5 x 56 cm) - nylon carry pouch included.

Part No. 0792
Contact NK for Pricing



Kestrel Portable Tripod

Clamp any Kestrel into this sturdy but lightweight tripod to take readings in the field. The tripod's legs extend to a maximum height of 10 inches (25.4 cm), and a minimum of 6 inches (15.25 cm). Ultra-compact and portable, it folds to just 7.5 inches (19 cm) and weighs 4.8 ounces (136 g). For further options, the top clamp detaches and is compatible with any tripod with a standard tripod mount. Or replace the clamp with the Kestrel Portable Vane Mount for a small, lightweight, portable weather station. Comes with a padded carry pouch.

MSRP \$25
Part No. 0807



Kestrel Interface



Kestrel® Interface

Computer Interface for use with the Kestrel 4000 series models

With the addition of the Interface, any Kestrel 4000 series meter becomes a complete weather station and data logger. Data can be uploaded for long-term storage, in-depth analysis and detailed charting. It also has a tripod mount, allowing the Kestrel to be mounted for continuous data logging.

Simply connect the interface cable to your computer, rest the Kestrel on the cradle, and upload your stored data. The included software is easy to use, and saves the data in a comma delimited text file for use in a text editor, spreadsheet or database.

The provided software works with PC (Windows 3.0 or higher). The interface is available with either an RS-232 9-pin serial connector or a USB connector.



"I always take a Kestrel with me on all my expeditions. While gathering weather information on my Arctic Expedition to the Geographic North Pole, I was able to assist world renowned scientists in making predictions about the Arctic Ocean and the changing environment, especially with the Kestrel's interface abilities to evaluate large amounts of data. Kestrel provides me with the accurate information that I need to be successful in my objectives such - as climbing some of the highest peaks or skiing across the Arctic Ocean or Antarctica continent."

- Doug Stoup, World Famous Mountaineer

**Serial Interface MSRP \$79
Part No. 0804SER**
**USB Interface MSRP \$109
Part No. 0804USB**

Kestrel Carry Cases



Kestrel 4000 Belt Clip Case

This sturdy padded nylon case lets you build a Kestrel 4000 Toolkit and still carry it on your belt with ease. The top flap features a hook/loop closure and a special window designed to keep the Kestrel 4000 sensors continuously exposed to the outside air, ensuring accurate logged readings. The durable elastic loop on the side of the case is perfect for carrying a small flashlight or other tool. No need to find yourself in the field with dead batteries -- an elastic battery loop inside securely holds two backup AAA batteries. The front pocket is sized to carry either a Silva Baseplate Compass for determining wind direction, or the Kestrel mini Pad/Pen set for taking notes. Manufactured exclusively for NK by Nitelze™, this case features their patented J-hook belt clip made of sturdy nylon/fiberglass composite. This hook accommodates up to a 2 1/4" belt and also attaches reliably over a waistband. For complete flexibility, this case includes a strong hook/loop strap to allow for easy mounting on a backpack or harness strap. Available in black only.

**Belt Clip Carry Case MSRP \$19
Part No. 0805**



Kestrel Tactical MOLLE-Compatible Case

This case is designed for military personnel wishing to carry their Kestrel on a MOLLE/PALS mounting system. Manufactured exclusively for NK by Special Operations Technology in the USA of USA components, it features a padded 1000 denier DuPont® Cordura® Plus fabric body, a reinforced top flap, a 1" fastex buckle closure, and an inner pouch for spare AAA batteries. The mounting system is SOTech's unique MOLLE/PALS compatible secure fold/lock design with no hardware to break or rust. This mounting system also adapts for use on a belt up to 2 1/2" wide. Sized for the Kestrel 4000 line, it will also hold a Kestrel 1000 to 3500 series inside its slip-on cover. Available in Black, Coyote Brown (dark khaki) and Ranger Green (muted drab olive).

Tactical Carry Case MSRP \$29
Black Part No. 0806BLK
Ranger Green Part No. 0806GRN
Coyote Brown Part No. 0806BRN



Accessories

Kestrel® Accessories



Replacement Impeller

Every Kestrel features a patented user-replaceable sapphire jewel bearing impeller. The Kestrel impeller is highly accurate and will take readings as low as 0.3 meters per second. After extensive use (approx. 400 hours), or use at speeds over 60 mph, the impeller's accuracy may be reduced slightly. This replacement impeller is necessary only when the original impeller is damaged or worn.

MSRP \$19
Part No. 0801

RH Field Calibration Kit

To ensure the accuracy of Kestrel humidity measurements, we offer our RH Field Calibration Kit. The kit includes two salt solutions, salt bath jars with plastic grids (to keep the Kestrel clean), one water jar to stabilize temperature, and an insulated calibration case. Every Kestrel RH Meter features an easy-to-run self-calibration routine for use with this kit. The calibration chambers can also be used to verify unit accuracy. The kit can be used indefinitely, and salt refills can be purchased as required.



MSRP \$79
Part No. 0802

Accessory Compasses

Not ready to step up to the Kestrel 4500 yet? Simply hold the Kestrel into the wind and use a pocket compass to determine the wind direction. These quality compasses are also a convenient and inexpensive way to verify the accuracy of your Kestrel 4500 compass calibration before heading into the field.



Silva Starter™ 1-2-3 Compass

This compass has 2° graduation lines as well as large numerals at every 20° mark, and its clear base plate makes it easy to read a map and set bearings. To get a precise wind direction, simply point the large base plate arrow into the wind, turn the bezel to match the red North indicator to the red needle, and read the wind direction at the base plate arrow. This full-featured compass has sure-grip dial

and ergonomically-contoured base plate that includes inch and millimeter rules for mapping and plotting. Pair the Polaris with a Kestrel 4000 and our Military/Tactical case for an easy-to-carry complete weather analysis tool kit.



Silva Wrist Band 340

This compass conveniently clips onto your Kestrel lanyard and is ideal for pairing with the 1000 to 3500 models. A sapphire bearing and a capsule designed to work on inclines gives you excellent accuracy and performance for such a small compass. A luminous dial is marked with a red arrow at the north point. S, E, W points are marked by letters while the intercardinal points are marked with long lines at the 90° positions. For even more accurate calculations, the rotating bezel has 10° graduations and locking teeth. (Can also clip onto a watchband.)

Accessory Compasses MSRP \$15 ea
Starter 1-2-3 Part No. 0808
Wrist Band 340 Part No. 0809

Private Labeling



There's no doubt - Kestrel Weather Meters are far more than mere gadgets. They're accurate, durable, American-made, and, well, cool! You'd be hard-pressed to find a person who wouldn't be excited to get a Kestrel as a gift. That's why Kestrel has worked with many companies over the years to develop customized co-branded versions of Kestrel Weather Meters for powerful promotional and gift campaigns.

Because Kestrels are made one at a time right in Pennsylvania, we have the ability to act on short notice to produce striking presentations of company logos and promotional messages.

Customization options include special labels, pad-printed logos or slogans, custom colors and detailed full-color packaging labels. Companies we've worked with have used private-labeled Kestrel units as executive gifts, purchase premiums, and field support tools for sales and installation personnel. Of course, co-branded Kestrel units receive full warranty and support from NK.

Let your brand soar on Kestrel's reputation. Get in touch with us to discuss your idea for a private-labeled Kestrel Meter.



DeKalb is a major producer of corn seed in the US. In 2006, they ran the "DeKalb Stands Tall in All Kinds of Weather" promotion to increase customer awareness of the challenges that farmers face due to the weather. A Kestrel Meter was an ideal promotional item!

We worked with their advertising agency to develop a custom DeKalb Kestrel 2000. It featured a DeKalb yellow case with their slogan pad printed on the front, and a custom window lens with their logo. We also added their contact information to the instructions, and packaged the units in a custom box with a 4-color label designed to convey the message of the campaign.



Common Kestrel Applications

You'll never believe how handy a Kestrel Meter is! At shows, in emails and letters, and on the phone, Kestrel enthusiasts love to tell us about how their Kestrel is making their job easier. And the list of applications keeps growing! From wildland firefighters putting their lives on the line, to kite surfers who are looking for the perfect conditions to play, a Kestrel Meter is the ideal companion. With thirteen different Kestrels to choose from, you can bet there's a Kestrel Meter with the specific features for each and every application. Visit www.kestrelweather.com for more detailed information about how people use their Kestrel Meters.

Got a Kestrel use not listed? We'd love to hear from you!

Outdoor

- backpacking & hiking
- biathlon
- camping
- climbing & mountaineering
- conditions monitoring by athletic trainers
- dog sledding
- figure skating
- fishing & hunting
- geocaching
- golfing & caddying
- hang gliding
- kite boarding
- kite surfing
- model airplanes
- paddle sports
- sailing & yachting
- scuba diving
- skeleton & luge
- ski patrol
- sky diving
- snow making
- snow sports
- wind surfing

Industrial

- air quality monitoring
- asphalt placement
- brick drying systems
- building science
- civil engineering construction
- concrete installation
- construction site monitoring
- crane operations
- demolition work
- electrical line work
- facilities monitoring
- furnace industry
- heating, ventilation, air conditioning
- indoor air surveys
- infrared roof inspection
- micro climate surveys
- mine operations
- mold samplings
- odor control surveys
- spray applications
- water damage restoration
- welding inspection

Scientific & Education

- academic research
- animal behavior research
- arboriculture
- astronomy
- biological research
- bird watching
- botany observation
- Boy Scouts
- cave research
- child care
- classroom use
- ecology & geology
- environmental conservation
- horticulture
- infrared thermography
- lab safety
- marine & ocean research
- mine surveys
- scientific expeditions
- survey
- windmill & wind power generation

Military

- combat weather
- critical response teams
- drop & landing zone safety
- expeditionary flight operations
- HVAC & space conditions monitoring
- K9 operations
- medic support
- mine removal
- NVBC & HAZMAT response
- sniper training & operations
- thermal imaging systems (FLIR)
- unmanned aerial vehicles

Forestry & Firefighting

- environmental conservation
- fire & rescue training
- hazardous materials response
- ladder trucks
- prescribed burning
- smoke coordinators
- smoke jumping
- structural fire fighting
- wildland firefighting

Weather

- amateur weather watching
- meteorology
- NOAA weather data collection
- storm chasing
- skywarn spotters
- TV weather reporting
- wind power generation

Rescue Services

- avalanche patrol
- border patrol
- coroner reports & studies
- dive rescue specialists
- emergency management
- EMT & first responders
- forensics
- HAZMAT/biohazard
- K9 handlers
- mountain rescue
- search & rescue

Auto

- drag racing
- engine tuning
- go-carting
- jetting
- motocross
- open wheel racing
- snowmobiling
- stock car racing
- track monitoring

Shooting Sports

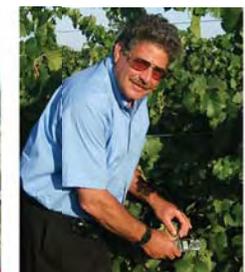
- archery
- bench rest shooting
- biathlon
- firearm ballistics
- hunting
- long range rifle competition
- SWAT
- safari guides
- target shooting

Agriculture

- animal husbandry
- arboriculture
- barn ventilation & RH monitoring
- crop harvesting
- golf course management
- grain handling
- herbicide & pesticide application
- irrigation audits
- landscaping
- livestock comfort
- poultry farming
- spray drift monitoring
- spraying
- vineyard management

Aviation

- air plane engine tuning
- crop dusting
- drop zone monitoring
- glider flying
- hot air ballooning
- parachuting
- paragliding & sailing
- powered parachute training
- small airport weather reporting
- space shuttle operations
- ultralight flying



What Makes a Kestrel So Special?

At Nielsen-Kellerman, weather is serious business! We've been researching, designing, manufacturing and distributing our Kestrel Meters for 10 years. NK's founders and lead engineers, Richard Kellerman and Paul Nielsen, are determined to make the most accurate and reliable hand-held weather devices available. They have developed four patented measurement technologies for the Kestrel family and continue to research ways to improve the Kestrel line and create new products to meet their customers' needs.

While it may not be obvious when you look at a Kestrel side-by-side with a competitor's weather meter, there are very important differences that make Kestrel the best choice for almost every application.

Certified and Guaranteed Accuracy

Every single Kestrel manufactured at NK is calibrated for every single value, either directly against NIST-traceable standards or against an intermediary standard that is calibrated daily. (The National Institute of Standards and Technologies is the federal technology agency that works with industry to develop and apply technology, measurements, and standards.) Every unit is shipped with a FREE Certificate of Conformity that states what calibrations were performed, and the certified performance specifications. What does that mean for the customer? They can be absolutely sure that their weather readings are accurate to the stated specifications. Some competing weather instruments claim the same specifications as Kestrel, but only Kestrel certifies their accuracy. For an additional charge, NK can even provide a NIST-traceable Certificate of Calibration that specifies exactly which values were measured in each multi-point calibration, and details the calibrated standard used for testing. Our 30-day satisfaction guarantee covers accuracy concerns as well. If a customer questions their unit's accuracy after purchase, they can contact us and we'll double-check every calibration to verify the unit meets specifications.

US Manufacturing

The entire Kestrel line is designed and built in the USA - no other handheld weather meter is. Some electronic components have to be sourced overseas these days, but we buy American wherever we can. We believe US manufacture is the only way we can ensure that every Kestrel will do its job right, and we also believe it's important to do our part to keep manufacturing alive and well in the US.

Money-Back Guarantee

We have a 30-day satisfaction guarantee, and a 2-year warranty. Our track record speaks for itself - the return rate for the entire Kestrel line for any reason is 0.002%. Even after the regular warranty expires, we cover every Kestrel FOR LIFE with our Customer Care Warranty Program, which allows users to trade in a used or damaged Kestrel for a replacement one at about half price. And, if a customer ever has a problem or question about their Kestrel, they can come straight to us. From our Customer Service Representatives to the President of the company, we all answer the phone and know these products inside and out. If you have a problem, we'll fix it.

Patented Removable Impeller

The Kestrel impeller measures 1 inch across and turns on a Swiss precision pivot mounted on sapphire bearings. Its large size ensures accurate readings even if pointed off-angle from the wind, and its very low start-up speed allows measurement of the lightest puffs of wind. Units with smaller impellers simply can't match the Kestrel's performance. If damaged, a new calibrated impeller can be purchased for \$19 and popped in without tools, restoring like-new performance. We designed and patented this removable impeller technology, and it keeps Kestrel Meters accurately measuring the wind speed for years.

Patented Dual Temperature Sensor RH Measurement

Relative humidity is tricky to measure - particularly in a sealed product. But, with wildland firefighters among our leading customers, we know it is essential that we get it right. Firefighters typically work in extreme conditions with very low humidity levels, and their lives literally depend on accurate readings. Accurate temperature measurement is critical to calculating relative humidity. That's why NK developed the patented Kestrel dual temperature sensor configuration. It is not necessary to wait the 20 to 40 minutes that would normally be required for the unit temperature to equilibrate to the air temperature after a temperature shift. As long as airflow over the temperature sensor is maintained, either by holding it into a breeze or waving it in the air, the external temperature sensor will provide instant and accurate readings of the outside air temperature, while the second sensor in the humidity chamber provides the

critical information about the internal unit temperature (even if different). The Kestrel then performs the calculations necessary to yield relative humidity accuracy of +/- 3% RH from 5 to 95% (both impressive statistics usually only found in units costing hundreds of dollars more). The humidity sensor in the Kestrel has been selected for long-term stability and reliable performance even at very low and very high humidity conditions. Every Kestrel is calibrated against NIST-traceable standards, and can be recalibrated in the field with the Kestrel RH kit.

Patented Temperature Measurement

Unlike most watches and other products with a temperature measurement, the Kestrel sensor is outside the case to ensure it measures the air, not your hand or pocket. The "curls" serve to further isolate the temperature sensor from the effects of the case temperature. Again, simply wave the Kestrel back and forth a few times and you'll have accurate air temperature readings in seconds. And, since the Kestrel is completely waterproof, you can actually take water temperature and snow temperature readings - simply submerge the sensor in the water or snow. Just ask the US Biathlon team - they used Kestrel 4000's in the 2006 Winter Olympics to measure air and snow temperature to determine the appropriate wax to use on their skis.

Pressure-Corrected Wet Bulb Temperature

Meters that provide wet bulb temperature readings without a pressure sensor assume standard atmospheric conditions, leading to highly inaccurate readings on low-pressure days, at high altitudes, or in any other "non-standard" situation. Kestrel meters only offer wet bulb temperature readings on our pressure-sensor equipped units, ensuring accuracy in all conditions.

Reliable Delta T

Delta T is a reading commonly used in dry climates to provide a quick guide to acceptable spraying conditions. It's the spread between the wet bulb temperature and the dry bulb temperature in °C. For example, it is not recommended to apply pesticides when Delta T is above 10 - a range of 2 to 8 is ideal. With the new Kestrel 3500 Delta T, the calculation is done for you, accurately and simply. Because the wet/dry bulb spread can be quite small, even a small error in either temperature reading will generate a large percentage of error in Delta T. The Kestrel 3500 Delta T does correct for pressure, ensuring that Delta T is measured accurately. NK currently sells our Delta T model primarily in Australia, but if you are interested in learning more, please contact us.

Leak and Drop Testing

NK specifies IP-67 sealing for every Kestrel. This means that a Kestrel is totally protected from dust and can be submerged in water to 1 m (3ft) for up to 30 minutes without any leakage. To ensure that each Kestrel meets this standard, we subject each one to a vacuum leak test after final assembly. We've heard of one Kestrel product tester who sank it in a lake for a full day of fishing, then pulled it out and put it back to work (that's dedication!) The appearance of Kestrel meters employed in underground coal mines is testimony to their dust-resistance. We have also drop-tested the Kestrel lineup to MIL-STD-810F (20 drops from 5' onto a hard surface.)

Field and Factory Recalibration

Not only is every Kestrel guaranteed accurate when it leaves the factory, but accuracy can be ensured by field and factory recalibration for years of reliable performance. Many highly technical applications require that measurement tools be recalibrated on a regular schedule. Relative humidity, wind, and barometric pressure measurements on each Kestrel can be calibrated in the field, no matter how old the Kestrel. To restore the wind speed calibration, the user need simply replace the impeller. To calibrate the relative humidity, the customer can employ the Kestrel Field Calibration Kit or send their unit back to us for factory recalibration. Recalibration of the barometric pressure is also possible so long as the user has a source of an accurate pressure reading. (Instructions are posted on our web site or the unit can be returned for factory calibration.) The only sensor that cannot be recalibrated is the temperature sensor, but in our 10 years of manufacturing Kestrels, we've never come across one that failed to meet specification, even after years of use.

Product Tune-Ups and Certification

If you would like to have your Kestrel checked for accuracy and restored to like-new performance, NK offers a Tune-up service that includes a new impeller, new batteries and full recalibration for a fraction of the original purchase cost. We also offer NIST-traceable Certificates of Calibration for industries that require it.

Customer Service & Tune-Ups

While the Kestrel Meters are pretty neat “gadgets,” the engineers who started NK know that they need to be *reliable* and *accurate*. Since the majority of users are utilizing their unit to make decisions about how to do their jobs safely and effectively, we believe that it’s absolutely essential that their Kestrel Pocket Weather Meter is the most accurate hand-held weather instrument available. We also believe that a Kestrel Meter should last for a long time, and offer services to keep units reliable and accurate for years to come. Our Warranty and Lifetime Product Support policies were structured with these beliefs in mind.

Kestrel’s 2-Year Warranty

NK does not believe in “disposable electronics.” We know our products don’t lead a pampered life, and we design them for years of performance in tough conditions. We guarantee every NK product to be free of defects in materials and workmanship for a period of TWO YEARS from your date of purchase, and offer a 30-day satisfaction guarantee.

Lifetime Customer Care

After the regular warranty expires, NK covers every Kestrel FOR LIFE with our Customer Care Warranty Program, which allows users to trade in a used or damaged Kestrel for a new replacement at about half price.

Field Calibration

Kestrel Meters can be quickly recalibrated in the field, giving users confidence to rely on their Kestrel. To field calibrate the wind or air flow readings, simply replace the impeller with a new one. For relative humidity readings, use the RH Field Calibration Kit. For pressure sensor calibration, check our website or contact our Customer Service Department for instructions. The only sensor that cannot be field calibrated is the temperature sensor. The Kestrel’s accurate temperature readings are due to NK’s patented external thermistor, and over the 10+ years that we’ve been building Kestrels, we’ve never identified one that needed recalibration.

Tune-Up Services

Just like a car goes into the shop for an oil change and lube, we offer Tune-Ups for each Kestrel model. The unit will be cleaned, updated with a new impeller, batteries, battery door (if needed), and the readings verified to be within specification. Depending on the model, some of the sensors are recalibrated. Once complete, the unit is leak tested, packed up and sent back to its owner, ready to go. Tune-up services are listed in the chart below:

	1000	2000	2500	3000	3500, 4100, 4000, 4200, 4500
	Clean and inspect unit. Test sealing. Install new calibrated impeller and battery, together with battery door and/or battery door o-ring as needed. Issue new Certificate of Conformity with SN of unit and impeller, Date of Test and operator’s initials.	Clean and inspect unit. Test sealing and temperature response. Install new calibrated impeller and battery, together with battery door and/or battery door o-ring as needed. Issue new Certificate of Conformity with SN of unit and impeller, Date of Test and operator’s initials.	Clean and inspect unit. Test sealing and temperature response. Recalibrate pressure. Install new calibrated impeller and battery, together with battery door and/or battery door o-ring as needed. Issue new Certificate of Conformity with SN of unit and impeller, Date of Test and operator’s initials.	Clean and inspect unit. Test sealing and relative humidity. Install new calibrated impeller and battery, together with battery door and/or battery door o-ring as needed. Issue new Certificate of Conformity with SN of unit and impeller, Date of Test and operator’s initials.	Clean and inspect unit. Test sealing and temperature response. Recalibrate pressure and relative humidity. Install new calibrated impeller and battery, together with battery door and/or battery door o-ring as needed. Issue new Certificate of Conformity with SN of unit and impeller, Date of Test and operator’s initials.
Price:	45.00	55.00	65.00	65.00	3500 90.00 4000 series 95.00

* 10% discount for 10 or more tune-ups on one order.

* If unit does not pass leak-test, brief efforts will be made to reseal unit (sealant applied to leaking area, screws tightened.) Units that cannot pass leak test will be noted.

* If tune-up reveals a leak or function that cannot be restored to specifications, customer will be contacted. Options are: a) pay a discounted rate for tune-up of remaining functions; b) turn in unit for new unit at CCD rate (no charge for test/tuneup); or c) have unit returned without completing tune-up services (no charge to customer.)

Test & Calibration Services

All of our measurements are traceable to the National Institute of Standards and Technology, ensuring the highest level of reliability. Our primary Calibration Standards are sent for calibration in accordance with NIST requirements and based on a regular schedule. Only approved laboratories and NIST themselves are used for these calibration services.

Every Kestrel Pocket Weather Meter is individually calibrated and tested to be within specification at the time of manufacture as follows:

- 1) Every wind impeller, including all replacement impellers, is individually wind-tunnel tested against a time of flight ultrasonic anemometer calibrated by NIST.
- 2) Every humidity-measuring instrument receives a two-point NIST-traceable calibration and is verified at a third intermediate value against a factory-calibrated hygrometer.
- 3) Temperature and pressure are functionally checked and verified against a NIST-traceable calibrated standard or reverified intermediary standard.

For users who must ensure that their Kestrel is operating within specifications, we offer Factory Calibration and Certification services for any Kestrel. For many users, simple recalibration to original specifications, without certification or individual documentation, is sufficient. For users who require documentation, we also offer fully-documented NIST-traceable calibration services. Full before/after data is reported and shown on the calibration certificate. Instruments may be calibrated at the time of purchase or subsequently. See the chart below for the Test & Calibration Services offered by NK:

	WIND SPEED/ AIR FLOW	TEMPERATURE	RELATIVE HUMIDITY	PRESSURE
TEST ONLY	Verified in wind tunnel at single speed. Standard and measured values recorded in R/A, together with recommended action (new impeller if out of specification.) *Test may also be performed after calibration at customer’s request - only one value to be tested/recorded.	Verified against calibrated standard (calibrated Kestrel 4000 or digital thermometer) at single temperature. Standard and measured values recorded in R/A, together with recommended action (replacement if out of specification.) *Test may also be performed after calibration at customer’s request - only one value to be tested/recorded.	Verified against calibrated standard (calibrated Kestrel 4000 or Edgetech) after equilibration. Standard and measured values recorded in R/A, together with recommended action (recalibration if out of specification.) *Test may also be performed after calibration at customer’s request - only one value to be tested/recorded.	Verified against calibrated pressure standard (calibrated Kestrel 4000 or Mensor) at single pressure. Standard and measured values recorded in R/A, together with recommended action (recalibration if out of specification.) *Test may also be performed after calibration at customer’s request - only one value to be tested/recorded.
Price	\$25.00	\$25.00	\$25.00	\$25.00
BASIC CALIBRATION (w/ Certificate of Conformity)	New calibrated impeller installed (calibrated at two points). Certificate of Wind Speed Conformity issued with SN of unit, Date of Test and operator’s initials.	Standard new unit calibration procedure applied. Certificate of Temperature Conformity issued with SN of unit, Date of Test and operator’s initials.	Standard new unit calibration procedure applied. Certificate of Relative Humidity Conformity issued with SN of unit, Date of Test and operator’s initials.	Standard new unit calibration procedure applied. Certificate of Pressure Conformity issued with SN of unit, Date of Test and operator’s initials.
Price	\$40.00	\$15.00	\$40.00	\$25.00
TEST + BASIC CALIBRATION	Perform both test & calibration services (above).	Perform both test & calibration services (above).	Perform both test & calibration services (above).	Perform both test & calibration services (above).
Price	\$60.00	\$35.00	\$60.00	\$45.00
NIST CALIBRATION (w/ full Certificate of Calibration)	Tested in wind tunnel against NIST-calibrated standard (Gil Anemometer) at two points - low and high speed. As found and as left data recorded at both points. New calibrated impeller installed prior to as left testing. Recommended calibration interval provided w/ calibration stickers.	Verified against NIST-traceable digital thermometer (Eutechnics digital thermometer) at two temperatures. As found and as left data recorded at both points. Recommended calibration interval provided w/ calibration stickers.	Verified against NIST-traceable hygrometer (Edgetech Dewprime) at low and high humidity. As found and as left data recorded at both points. Recommended calibration interval provided w/ calibration stickers.	Verified against NIST-traceable barometer (Mensor) at two pressures. Recalibrated to specifications. As found and as left data recorded at both points. Recommended calibration interval provided w/ calibration stickers.
Price	\$145.00	\$75.00	\$145.00	\$95.00

Note: if more than one test or basic calibration is required, a Tune-Up usually offers savings.

Kestrel® Pocket Weather® Meters Specifications

Measurement Response Time	Model	Units	Operational Range	Resolution	Accuracy (+/-)	Specification Range
Wind Speed (Air Velocity) 1 second	All Models	m/s	0.4 to 60.0 m/s	0.1		0.4 to 40.0 m/s
		ft/min	59 to 11,948 ft/min	1	Larger of 3% of reading or least significant digit	59 to 7877 ft/min 1.0 to 144.0 km/h
Wind Direction / Forward Heading 1 second	4200 4300	°	0 to 360°	1	5°	0 to 360°
		Cardinal Points	360°	16 Points	5°	0 to 360°
Temperature 1 second	2300 2500 2900 3300 3500 4100 4200 4300	°F	-49.0 to 257.0 °F	0.1	1.8 °F	-20.0 to 168.0 °F
		°C	-45.0 to 125.0 °C	0.1	1.0 °C	-29.0 to 70.0 °C
Relative Humidity 1 minute	3000 3500 4100 4200 4300	%RH	0.0 to 100.0 %	0.1	3.0 %RH	5.0 to 95.0 % non-condensing
		Polymer capacitive humidity sensor mounted in thin-walled chamber external to unit plane to permit operation while measuring wind speed. Declination/variation adjustable for True North readout. Accuracy of measurements dependent upon units vertical position. Self-calibration routine eliminates magnetic error from batteries or unit and must be run after every full power-down (battery removal or change).				
Pressure 1 second (mb & PSI 4000 model only)	2300 3500 4200 4300	inHg	8.86 to 32.48 inHg	0.01	0.05 inHg	At 77.0 °F, <19,700 ft
		hPa / mb	300.0 to 1100.0 hPa / mb	0.1	1.5 hPa / mb	At 25.0 °C, <6,000 m
Altitude 1 second	2300 3500 4200 4300	PSI	4.4 to 16.0 PSI	0.1	0.1 PSI	At 77.0 °F, <19,700 ft
		Temperature compensated pressure (barometric) altimeter.				
Crosswind Headwind, Tailwind 1 second	4300	mph	0.8 to 135.0 mph	1	5%	8.5 to 89.0 mph
		ft/min	59 to 11,980 ft/min	1	5%	750 to 7832 ft/min
Wind Chill 1 second	2300 2500 2900 3300 3500 4100 4200 4300	kn/h	1.0 to 217.3 kn/h	0.1	5%	13.7 to 143.2 kn/h
		m/s	0.4 to 60.0 m/s	0.1	5%	3.8 to 40.0 m/s
Heat Index 1 minute	3000 3500 4100 4200 4300	knots	0.6 to 117.3 kt	0.1	5%	7.4 to 77.0 kt
		°F	0.7 to 135.0 °F	0.1	1.8 °F	1.8 to 89.0 °F, -50.0 to 50.0 °F
Dewpoint 1 minute	3000 3500 4100 4200 4300	°C	0.4 to 60.0 °C	0.1	1.0 °C	0.4 to 40 °C, -45.6 to 10.0 °C
		Calculated from the primary measurements of temperature and relative humidity. Temperature to which the air would need to be cooled at a constant pressure to become saturated.				
Wet Bulb Temperature 1 minute	3000 3500 4100 4200 4300	°F	-49.0 to 257.0 °F, 0.0 to 100.0 %RH, 8.86 to 32.48 inHg	0.1	3.6 °F	32.0 to 100.0 °F, 5.0 to 95.0 %RH, 8.86 to 32.48 inHg, <19700 ft
		°C	-45.0 to 125.0 °C, 0.0 to 100.0 %RH, 300.0 to 1100.0 hPa	0.1	2.0 °C	0.0 to 37.8 °C, 5.0 to 95.0 %RH, -2000.0 to 9000.0 hPa, <6000 m
Humidity Ratio 1 minute	4200	gpp	0.000 to 5000.0 gpp	0.1	5%	-20 to 130°F, 5 to 95% RH, 8.86 to 32.48 inHg
		g/kg	0.000 to 720.0 g/kg	0.01	5%	-29 to 54°C, 5 to 95% RH, 300.0 to 1100.0 hPa
Density Altitude 1 second	4000 4100 4200 4300	ft	-49.0 to 257.0 °F, 0.0 to 100.0 %RH, 8.86 to 32.48 inHg	1	246	32.0 to 100.0 °F, 5.0 to 95.0 %RH, 8.86 to 32.48 inHg, <19700 ft
		m	-45.0 to 125.0 °C, 0.0 to 100.0 %RH, 300.0 to 1100.0 hPa	1	75	0.0 -37.8 °C, 5.0 to 95.0 %RH, -2000.0 to 9000.0 hPa, <6000 m
Max/Avg Wind Speed (Air Velocity), Crosswind, Headwind/Tailwind	All Models	One-button clear and restart of Max Wind Gust and Average Wind measurement.				
		Continuously updating three-hour barometric pressure trend indicator: rising rapidly, rising, steady, falling rapidly.				
Pressure Trend	2500 3500	Minimum, maximum, average and logged history stored and displayed for every measured value. 2000-point data logger with graphical display. Auto data storage; interval settable from 2 seconds to 12 hours. Manual data capture.				
		Requires optional PC interface (NPK PN-0830) and provided software. RS-232 connection with USB adapter available.				
Data Storage / Display	4000 4100 4200 4500	Reflective 3 1/2 digit LCD. Digit height 0.36 in / 9 mm.				
		Reflective 4 digit LCD. Digit height 0.36 in / 9 mm.				
Display Update	1000 2000 3000 2500 3500 4000 4100 4200 4500	Multifunction, multi-digit programmable dot-matrix display.				
		1 second.				
Display Backlight	All Models	Aviation green electroluminescent backlight.				
		Choice of aviation green or visible red (4000 & 4500 only) electroluminescent backlight. Automatic or manual activation.				
Clock / Calendar	2000 2500 3000 3500 4000 4100 4200 4500	Real-time hours:minutes clock.				
		Real-time hours:minutes:seconds clock, calendar, automatic leap-year adjustment.				
Operational Temperature Range (LCD and Batteries)	All Models	The operational temperature range of the liquid crystal display and batteries is 14° F / -10 °C to 55 °C. Beyond the limits of the operational temperature range, the unit must be maintained within range and exposed for minimum time necessary to take reading.				
		-22 °F to 140 °F / -30 °C to 60 °C.				
Storage Temperature	All Models	After 45 minutes of no key presses.				
		User-selectable: 15 or 60 minutes with no key presses or disabled.				
Auto Shutdown	2000 2500 3000 3500 4000 4100 4200 4500	English, French, German, Italian, Spanish.				
		CE certified. Individually tested to NIST-traceable standards (written certificate of tests available at additional charge).				
Languages	All Models	CR2032, one, included. Average life, 300 hours of use. +/- depending on backlight use.				
		AAA Alkaline, two, included. Average life, 400 hours of use. +/- depending on backlight use.				
Certifications	2000 2500 3000 3500 4000 4100 4200 4500	Waterproof (IP67 standard). Drop-tested (MIL-STD-810F; unit only). Substantial impact may damage replaceable impeller).				
		Unit 4.8 x 1.7 x 0.7 in / 122 x 42 x 18 mm. Case 4.8 x 1.9 x 1.1 in / 122 x 48 x 28 mm.				
Batteries	All Models	Unit 5.0 x 1.8 x 1.1 in / 12.7 x 4.5 x 2.8 cm.				
		Unit 2.3 oz / 65 g. Case 1.3 oz / 37 g.				
Environmental	2000 2500 3000 3500 4000 4100 4200 4500	Unit 3.6 oz / 102 g.				
Dimensions	All Models					
Weight	All Models					

Contact Info

NK proudly supports our soldiers in Iraq and Afghanistan

We recently provided a Kestrel 4000 setup to a guard reconnaissance platoon that had been in Afghanistan for almost a year. Here's their response:

"We have been out on a thirty five day field problem in the Central Hindu Kush mountains. Yes, very cold and very snowy. We were ecstatic to hear that you had shipped us a Kestrel 4000 with all of the accoutrements. OUTSTANDING!!! Weather here, as you can tell by my description in the first few sentences, is KEY to our operations. Especially with us reconnaissance/Sniper types who depend on accurate measurements meteorologically speaking to make accurate shots and to determine extreme weather changes at the life threatening altitudes we operate in. That is where the Kestrel will assist... I, we, thank you and your organization for your assistance. It is companies like yours that make us all motivated when we get so much support... Thanks again and we will be in touch... WE LOVE YOUR PRODUCTS!"

In Kandahar, Afghanistan, military personnel involved in Operation Enduring Freedom are using Kestrel Weather Meters and highly trained dogs to clear land mines and unexploded ordnances. It is critical that the dogs are working in the appropriate environmental conditions since missing a mine can lead to accidental detonation by the dog's handler or a civilian. Blake Isaacson, U.S. Army B. Co. 367th Eng Bn out of Mankato, Minnesota, reports that they are using the Kestrel 3000 to check the environmental conditions as the dogs are proofing an area.

"Again I would like too say THANK YOU, you have been very helpful and supportive in helping me to complete my mission in support of OEF V. The Kestrel was a mission essential tool."



In Mosul, Iraq, combat weatherman TSgt. Kurt Rohl consults his Kestrel 4000. Rohl was part of the combat weather team at the Mosul Airport, where he gave air crew up-to-date weather information.

For resale/wholesale information:

Katie Horn, Kestrel Sales Mgr

email: khorn@nkhome.com phone: 610.447.1555 x220

To place an order:

Dawn Schmidt, Kestrel Customer Service Representative

email: orders@nkhome.com phone: 610.447.1555 x202

visit www.kestrelweather.com to create a dealer account and to place, review and track orders.

For artwork, advertising materials & website content:

Amy Winner, Brand Mgr

email: awinner@nkhome.com phone: 610.447.1555 x219

For promotions, donations & event planning:

Christy Munding, Assistant Brand Mgr

email: cmunding@nkhome.com phone: 610.447.1555 x227

For repairs & tech support information:

Angie Crowe, Repairs & Support

email: support@nkhome.com phone: 610.447.1555 x211

Mailing Address: Kestrel Pocket Weather Meters, 21 Creek Circle, Boothwyn, PA 19061

Email: kestrel@nkhome.com

Web: www.kestrelweather.com

Toll-free: 800.784.4221

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Kiteboarding Magazine Editor Aaron Sales takes a quick wind reading before taking off in Hood River, Oregon.