

**WIND SPEED • TEMPERATURE • WIND CHILL
• BAROMETRIC PRESSURE • ALTITUDE**

Know your conditions

Measure environmental conditions quickly and accurately



- **Small, robust design**
- **3-hour pressure trend**
- **Data hold function**
- **Real time clock**
- **Large easy to read display with backlight**
- **Navigation made easy with prompts**
- **Waterproof and floats**
- **High precision jewel mounted impeller**
- **Replaceable impeller assembly**
- **Fast response temperature sensor**
- **Long life lithium battery**
- **Includes protective cover, lanyard and battery**
- **Five year warranty**
- **Choice of measurement units**

- **OLIVE DRAB option: low intensity red backlight**
- **GOLD option: standard green backlight**



K2500NV

DESCRIPTION

The Kestrel 2500 pocket weather meter provides high quality, performance and functionality. It has three buttons below the display, making operation simple and allowing the user to view data in current, maximum and average wind speed displays, temperature, wind chill, barometric pressure and altitude displays and also the data hold function.

The Kestrel 2500 Pocket Weather Meter is a small, pocket-sized electronic rotating vane type of anemometer with built-in temperature and barometric pressure sensors. It uses high precision jewel bearings and a light weight impeller to provide accurate air flow measurements even at low speeds. The impeller assembly is replaceable by the user in the case of damage.

A trend arrow displays whether the barometric pressure is rising, stable or falling. This trend is calculated over a 3-hour period. The pressure is monitored even when the Kestrel 2500 is switched off. Observing the barometric pressure trend enables prediction of future weather conditions.

The Kestrel 2500 also displays altitude in an easy-to-read digital format - making it the ideal instrument for walking, climbing and other outdoor activities.

The liquid crystal display has large 9mm high digits and is backlit for a clear readout in low light conditions. For users with after dark requirements, the olive drab K2500NV has a lower intensity red backlight to help preserve night vision. Power is

from an easily replaceable standard lithium coin type cell, which will typically give up to 300 hours of operation. The instrument automatically switches off if no keys are pressed for 45 minutes.

The Kestrel 2500 is made from high impact injection moulded plastic and corrosion resistant materials with the electronics fully sealed. It will float if accidentally dropped into water. There is a hard cover for protection when not in use and a lanyard is provided for added security.

APPLICATIONS

ALL – sailors, walkers, climbers, bird watchers, model boats/air craft, kite flyers, archery, shooting, fishing, golf & athletics

Agriculture – checking conditions prior to crop spraying or burning

Aviation – gliders, para-gliders, micro-lights, parachutists and ballooning

Construction – site safety, working conditions, working at height in cranes or access vehicles

Education – air flow experiments, environmental studies, outdoor sports

Heating and ventilation – air flow through fans, checking condition of filters

Industry – air flow measurements, pollution control
Science – aerodynamics, environmental science and meteorology

Fire fighters – checking fire spreading hazard

SPECIFICATION

Physical	Dimensions	122mm x 42mm x 20mm		
	Cover dimensions	122mm x 46mm x 26mm		
	Weight	65g		
	Cover weight	37g		
	Lanyard	0.5m		
	Case colour	Gold or olive drab for NV version		
Display	Display type	Reflective 4 digit LCD		
	Digit height	9mm		
	Display update	1 second		
	Functions (with on screen prompt)	Current wind speed (3 second average) (SPd)		
		Average speed since power on (AVG) (SPd)		
		Maximum 3 second gust since power on (MAX) (SPd)		
		Temperature (deG)		
		Wind chill (chill)		
		Barometric pressure (bAro)		
		Altitude (ALt)		
	Data hold (HOLD)			
Speed units	kt, m/s, km/h, mph, ft/min, Beaufort Force (B)			
Temperature units	°C, °F			
Pressure units	hPa, inHg			
Altitude units	m, ft			
Performance	Speed (1 sec response)	Operational range	0.4m/s to 60m/s (0.8 to 135.0mph)	
		Specification range	0.4m/s to 40m/s (0.8 to 89.0mph)	
		On axis accuracy	Larger of ± 3% of reading or least significant digit. (Some loss of accuracy from bearing wear may occur with sustained operation at or near maximum speed)	
		Off-axis response	-1% @ 5°, -2% @ 10°, -3% at 15°	
		Calibration drift	<1% after 100hrs operation at 7m/s	
		Resolution	0.1 kt, m/s, km/h, mph. 1 FPM below 1999 FPM, 10 FPM above 2000 FPM. 1 Beaufort (0 to 12)	
	Temperature (1 sec response)	Operational range	-45.0°C to +125.0°C	
		Specification range	-29.0°C to +70.0°C	
		Accuracy	±1°C	
		Resolution	0.1°	
	Wind chill	Wind chill accuracy	±1.0°C (from wind speed and temperature)	
		Barometric Pressure (1 sec response)	Operational range	10 to 1100 hPa at 25°C
			Specification range	750 to 1100 hPa at 25°C
			Resolution	0.1 hPa
			Accuracy	±1.5 hPa (max error over range 0°C to 70°C: ±2.0 hPa)
	Calibration drift	Typically ±1 hPa per year (correctable)		
	Altitude (1 sec response)	Operational range	-2000m to +9000m (-6000 ft to +30,000 ft)	
		Specification range	-2000m to +6000m at 25°C	
		Accuracy	±15m (max error out of spec range: ±30m)	
Resolution		1m or 1ft		
Sensors	Impeller	Diameter 25mm. High precision axle and jewel (sapphire) bearings. User replaceable impeller assembly		
	Temperature	Thermally isolated, hermetically sealed precision thermistor		
	Pressure	Monolithic piezo-resistive silicon based sensor with second-order temperature correction		
Environmental	Sealing	Electronics enclosure IP67 [Water resistant]		
	Shock	Drop tested (MIL-STD.810F - unit only)		
	Temperature	Operating range: -10°C to +55°C (for LCD readability and batteries) Storage range: -30°C to +60°C		
	EMC	CE marked		
Miscellaneous	Battery	Lithium coin cell CR2032, included, user replaceable		
	Battery Life	300 hours of use, typical ± depending on backlight use		
	Auto switch off	45 minutes after last key press		
	Cover	Snap on hard cover for protection		
	Wind chill equivalent temperature calculation	Utilises the (US) NWS Wind Chill Temperature (WCT) Index, revised 2001, with wind speed adjusted by a factor of 1.5 to yield equivalent results for wind speed measured at 10m above ground		
	Certification	Wind speed, temperature and pressure measurements are tested during manufacture. A certificate of conformity (C of C) is included with each Kestrel. Calibration certificates are available for an additional fee.		
	Guarantee	5 years		

The manufacturer reserves the right to amend the specification and therefore the information in this document may be subject to change. Please check our website www.r-p-r.co.uk for details

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