WIND SPEED • TEMPERATURE
HUMIDITY • DEW POINT • WET BULB TEMPERATURE
DELTA T • BAROMETRIC PRESSURE • ALTITUDE

Know your conditions - Measure environmental conditions quickly and accurately
Determine if conditions are acceptable for crop spraying

- **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 Zytel® 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**

DESCRIPTION

The Kestrel 3500 Delta T pocket weather meter provides high quality, performance and functionality. Three buttons on the front of the instrument mean operation is extremely simple and allow the selection of current, maximum and average wind speed, temperature, relative humidity, dew point, wet bulb temperature, delta T, barometric pressure and altitude displays and also data hold. To make navigation between functions even easier, a prompt indicating the function, flashes on the screen as you scroll through.

The Kestrel 3500 Delta T includes an automatic Delta T calculation. Predominantly used by those in the agricultural industry, this provides a quick guide to determining acceptable crop spraying conditions. The Delta T is the spread between the wet bulb temperature and the dry bulb temperature (in degrees C).

It is not recommended pesticides are applied when the Delta T is above 10 - a range of 2 to 8 is ideal. With the Kestrel 3500 Delta T, the calculation is done for you, accurately and simply.

The Kestrel 3500 Delta T incorporates barometric pressure correction in its wet bulb temperature calculation, ensuring accuracy even on low pressure days, at high altitudes and in very dry weather when Delta T monitoring is important. No other pocket weather meter offers this feature with this level of accuracy.

A trend arrow displays whether the pressure is rising, stable or falling, this trend is calculated over a 3-hour period. The pressure is monitored even when the 3500 Delta T is switched off.

The Kestrel 3500 Delta T Pocket Weather Meter is a small, pocket-sized electronic rotating vane type of anemometer with built-in temperature, humidity and barometric pressure sensors. It uses high precision Zytel® 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.

The humidity sensor compensates for temperature changes and is designed for stability and accuracy.

The liquid crystal display has large 9mm high digits and is backlit for a clear readout in low light conditions.

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 3500 Delta T 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.

FIVE-YEAR 5 WARRANTY

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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		Yellow	
Display	Display type		Reflective 4 digit LCD	
	Digit height		9mm	
	Display update		1 second	
	Functions (with on screen user prompts)		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)	Delta T (deL t)
			Relative humidity (r.h.)	Barometric pressure (bAro)
			Dew point (d.P.)	Altitude (ALt)
			Wet bulb temperature (bulb)	Data hold (HOLD)
	Speed units		kt, m/s, km/h, mph, ft/min, Beaufort Force (B)	
	Temperature units		°C, °F	
	Relative humidity units		%	
	Pressure units		hPa, inHg	
	Altitude units		m, ft	
Performance	Speed (1 sec response)	Operational range	0.6m/s to 60m/s (1.3 to 135.0mph)	
		Specification range	0.6m/s to 40m/s (1.3 to 89.0mph) Start-up speed stated as lower limit, readings may be taken down to 0.4 m/s | 79 ft/min | 1.5 km/h | .9 mph | .8 kt after impeller start-up.	
		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°	
	Relative Humidity (1 min response)	Operational range	0% to 100%	
		Specification range	5% to 95% non-condensing	
		Resolution	0.1%	
		Accuracy	±3% (when unit allowed to equilibrate to external temperature)	
		Calibration drift	±2% over 24 months (correctable)	
	Dew point accuracy		±2°C (above 20% relative humidity)	
	Delta T accuracy		±3°C	
	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)	
	Wet bulb temperature accuracy		±2°C (between 0°C and 37.8°C)	
	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 low-friction Zytel® bearings. Replacement impeller field installs without tools.	
	Temperature		Air, water or snow temperature. Hermetically-sealed, precision thermistor mounted externally and thermally isolated (US Patent 5,939,645) for rapid response. Airflow of 2.2 mph | 1 m/s or greater provides fastest response and reduction of insulation effect. Calibration drift negligible.	
	Relative Humidity		Polymer capacitive sensor, mounted externally in thin-walled chamber	
	Pressure		Monolithic piezo-resistive silicon based sensor with second-order temperature correction	
Environmental	Sealing		Electronics enclosure IP67 and NEMA-6 [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	
	Certification		Wind speed, temperature, humidity 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