TEMPERATURE • RELATIVE HUMIDITY • STATION PRESSURE
HEAT STRESS INDEX • DEW POINT • DENSITY ALTITUDE

Log It. View It. Share It.

- **Accurate temperature, humidity & pressure measurement**
- ***Bluetooth*® Smart wireless communication for real-time viewing & charting of data on a smart device**
- **Kestrel Connect App free from the App Store**
- **Compatible with iPhone, iPad or iPod (generation compatible)**
- **Send & share data via email, text and social media**
- **Waterproof to IP67 standard**
- **Rugged, drop tested to MIL-STD-810G standard**
- **Available in red, blue and tan**
- **5 year warranty**

Measurement	Units of Measure	Accuracy	Range
Temperature, Heat index Dew Point	ºC, ºF	0.5ºC	-20 to +55ºC
Pressure	hPa/mbar, inHg, PSI	0.1hPa/mbar	700-1100 hPa/mbar
Relative Humidity	%	±2%	10 to 90%

DESCRIPTION

The Kestrel DROP® D3 data logger is a blind data logger for monitoring goods in transit, Building Management, Medical, Outdoor Activities, Agriculture, Education, HAZMAT and many more.

The Kestrel DROP® D3 is compact, durable and fully waterproof to IP67 standards and drop tested to MIL-STD-810G standard. You can place a Kestrel DROP logger almost anywhere discreetly (hidden if required), with confidence it will start gathering data accurately and consistently.

All Kestrel DROP® use Bluetooth® Low Energy (BLE) to communicate; no more USB cables or having to connect the logger to a USB cradle or PC port to get data. Simply use your smart device to connect wirelessly and the Kestrel Connect App will download the data for charting and manipulation. From here data can be shared easily via email, text or social media.

In order to quickly determine a steady temperature reading, the precision thermistor temperature sensor is mounted externally.

Heat index is the combined effect of air temperature and relative humidity.

Power is from an easily replaceable standard CR2032 lithium coin cell battery, which will typically give up to 6 months of operation.

The Kestrel DROP D3 is made from high impact injection moulded plastic and corrosion resistant materials with the electronics fully sealed. It is fully waterproof and can be used to log water and snow temperatures.

SPECIFICATION

Primary Measurement	Units	Resolution	Accuracy (+/-)	Specification Range	Notes
Ambient Temperature	°F	0.1	0.9 °F	14 to 131°F	Airflow of 2.2 mph/1m/s or greater provides fastest response and reduction of insolation effect. For greatest accuracy, avoid direct sunlight on the temperature sensor and prolonged sunlight exposure to the unit in low airflow conditions. Calibration drift is negligible for the life of the product. For further details, see Battery Operational Temperature Limits.
	°C	0.1	0.5 °C	-10 to +55 °C	
Relative Humidity	%RH	0.1	2 %RH	10 to 90% 25°C noncondensing	Polymer capacitive humidity sensor mounted in thin-walled chamber for rapid, accurate response (US Patent 6,257,074). To achieve stated accuracy, unit must be permitted to equilibrate to external temperature when exposed to large, rapid temperature changes and be kept out of direct sunlight.
Pressure	hPa/mbar	0.1	1.5 hPa/mbar	700-1100 hPa/mbar	Monolithic silicon piezo-resistive pressure sensor with second-order temperature correction. Between 1100–1600 mbar, unit will operate with reduced accuracy. Sensor may not operate above 1600 mbar and can be damaged above 6,000 mbar or below 10 mbar. Calibration drift is negligible for the life of the product.
Heat Index	°F	0.1	5°F	10% to 90% RH at 77°F/25°C over 10 - 55°C/50 - 131°F.	Calculated measurement. Perceived temperature resulting from the combined effect of temperature and relative humidity. Calculated based on NWS Heat Index (HI) tables. (Measurement range limited by extent of published tables)
	°C	0.1	2.6 °C		
Density Altitude	ft	0.1	82	10% to 90% RH over 10 - 55°C/ 50 - 131°F	Calculated measurement
	m	0.1	25		
Dew Point	°F	0.1	3.0 °F	10% to 90% RH at 77°F/25°C over 10 - 55°C/50 - 131°F	Calculated measurement. Temperature that a volume of air must be cooled to, at constant pressure, for the water vapour present to condense into dew and form on a solid surface. Can also be considered to be the water-to-air saturation temperature.
	°C	0.1	1.8 °C		
Bluetooth Data Upload	Utilizes Bluetooth Low Energy (BLE) module. | iOS Device needed to receive uploaded data. iOS Device must be within range to receive data. | (See Getting Started with your Drop for more info.)				
Data Storage	Configurable within App				
Response Time	Configurable within App up to 2 seconds.				
Temperature Range	Operational: -18 ºC to +60 ºC, 10 TO 1200 hPa, 0 to 100% RH, some functionality may be limited or disabled at extremes. Storage: -22.0 °F to 140.0 °F | -30.0 °C to 60.0 °C.				
Clock and calendar	Time and Date is automatically updated when connected to phone				
Certifications	CE certified, FCC, IC tested, RoHS and WEEE compliant. Individually tested to NIST-traceable standards				
Battery	One CR2032 Battery (included). The battery life will vary based on usage. For baseline conditions and settings[1], the battery will last approximately 6 months. Battery life will be reduced by: a) colder conditions b) more frequent logging rates c) more frequent update rates Downloads of large data logs (or firmware updates) are best completed with a fresh battery and in temperatures above 10°C / 50°F. ([1]Temperature = 75°F, Logging Rate = 10 minutes, Update Rate = 30 seconds)				

Environmental	Sealing: Waterproof (IP67 and NEMA-6). Shock Resistance: MIL-STD-810G, Transit Shock, Method 516.5 Procedure IV (4 foot drop test)
Origin	Designed and manufactured in the USA from US and imported components. Complies with Regional Value Content and Tariff Code Transformation requirements for NAFTA Preference Criterion B.
Size & Weight	2.4 x 1.8 x 0.9 in / 6 x 4.5 x 2.3 cm, 1.2 oz / 34 g (Lithium battery included)
Colour Options	Red | Blue

The manufacturer reserves the right to amend the specification and therefore the information in this document may be subject to change.
Accuracy calculated as uncertainty of the measurement derived from statistical analysis considering the combined effects from primary sensor specifications, circuit conversions, and all other sources of error using a coverage factor of k=2, or two standard deviations (2Σ).

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