Trusted DTM | KE2 Wireless Sensor
for Temperature & Humidity

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Introduction:

More than waterproof and portable, the **KE2 Wireless Sensor** is a high-precision digital temperature and humidity indicator (thermo-hygrometer). The wireless signal and light-weight design mean installation takes just seconds. And, the sensor's 3-year battery life ensures low maintenance and extended performance.

The Trusted DTM Edge Manager automatically finds and dashboards up to (35) **KE2 Wireless Sensors** and KE2 Therm controllers. So, local monitoring is almost instantaneous, and IT support is generally not necessary. Remote monitoring is easily achieved by using KE2 Therm's KE2 SmartAccess and/or the KE2 Connect's Trusted DTM Portal.

After powering the unit on, the KE2 Connect EDGE Manager will automatically locate the KE2 Wireless Sensor and provide temperature and humidity data.

The KE2 Wireless Sensor uses a high-quality, integrated digital temperature and humidity sensor module, ensuring the transmitter's superior long-term stability, low latency and resistance to chemical contamination, thus providing an excellent platform to deliver temperature and humidity data.

Application:

The **KE2 Wireless Sensor** can be used to measure environmental temperature and humidity in industrial, commercial, and residential environments. Common applications are: laboratory, agricultural, communications, storage facilities, warehouses, refrigerated spaces, medical and hospitality.

Features & Benefits:

- High-accuracy digital temperature and humidity sensor inside
- Temperature monitoring - tenths of a degree
- Humidity monitoring - relative humidity +/- .25%
- Configurable location name
- Wireless signal - using BLE 4.1 (Bluetooth Low Energy device)
- E-mail/Text alerts (see list below)
- IP66 waterproof level
- 300ft./100m broadcasting range
- 3- year battery life (AAA)
- Low battery indicator
- 12-month free Trusted DTM portal access
- Ultra-low power consumption chipset nRF52832
- Very fast start-up and measurement time
- Real-time data converting, storing, & uploading
- Excellent security mechanism

Alarms:

- High/low temp alarm with adjustable time delay
- Disconnect alarm - Edge Manager loses contact with sensor
- Device loss alarm - **KE2 Wireless Sensor** loses contact for an extended period (user defined)
- Portal Disconnect Alarm (optional)

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Physical Properties:

(21632) - KE2 Wireless Sensor for Temperature and Humidity

(21633) - KE2 Wireless Sensor for Temperature and Humidity with External Sensor - 36" sensor wire

Waterproof Level	IP66
Case Material	ABS
Case Color	White
Product Dimensions	70.6 x 38 x 17.8mm
Unit Weight	1.52 oz. / 43g
Battery Type	(2) AAA - FR03 Li-Fe batteries
Voltage	3V
Data Access	Edge Manager Product Line or KE2 Connect Mobile Client
Average Power Consumption	35uA
Transmission Range	Max. 300ft/100m in open space
Assemble	3M adhesive

Technical Specifications:

Item		**Value**	**Error Range**
Temperature	**Range**	-40°F to 158°F -40°C to 70°C	Depends on battery working environment
	Measure Accuracy	50°F to 122°F 10°C to 50°C	0.9F° 0.5C°
		≤50°F or ≥122°F ≤10°C or ≥50°C	±3.6F° ±2.0C°
Humidity	**Range**	0%RH to 100%RH	----
	Measure Accuracy	0%RH to 90%RH	±2.5% RH
		≥90%RH	±3.5% RH
	Resolution	0.05%RH	----
Sampling Period	----	Once per second	----

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Electrical Specifications:

Static Current	<3uA (power consumption under power-off status)
Peak Current	<8mA
Average Current	<35uA (not including power consumption on data transmission)
Battery Type	FR03
Battery Capacity	1250mAH
Lifetime	Over 3 years

Environmental Properties:

Working Temperature	-40°F to 158°F -40°C to 70°C
Long-term Storage Temperature	50°F to 77°F, ≤ 65%RH 10°C to 25°C, ≤ 65%RH

FCC Caution：

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

IC Caution:

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:
(1) This device may not cause interference; and
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux apparei ls radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.