

20100-K Blue2[™] Instrument Functional Overview

The Blue2 has an ABS plastic housing with antimicrobial additive that is IPX7 waterproof rated. The unit has an ambient operating environment range of 32° to 122°F (0° to 50°C). The Blue2 has a temperature range of -40° to 999°F (-40° to 537°C) with a resolution of 0.1°. The accuracy of the unit is $\pm 0.5^{\circ}$ F ($\pm 0.3^{\circ}$ C) and is traceable to NIST standards.

Battery Installation & Usage

Install the replaceable 3V Lithium Cell Battery (CR123A) included with the Blue2 instrument prior to using the unit. Remove the battery door by twisting counter clockwise, moving the door into the unlocked position. Insert the battery into the chamber positive end first (+). Replace the battery door, aligning the center piece with the unlock icon and twist clockwise to place the door back into the locked position.



Battery life status may be displayed on your smart device if the 3rd party application features this service. When the battery gets below 1% it will stop transmitting temperatures and will need to be replaced. Typical battery life is 500 hours.

Connecting a Type K Probe

Any Type K thermocouple temperature probe can be used with the Blue2 instrument. Be sure you insert the probe connectors positive (+) and negative (-) polarity correctly into the Type K connector.

Connecting a Type K Probe with Secure Lock

- 1. Remove the screw from the instrument
- 2. Insert Type K connector into socket on Blue2 unit.
- 3. Use a small Phillips (#1) screwdriver to tighten the screw snug. It is important not to overtighten.
- 4. When loosening the screw, back off approximately 0.16" until the thread is no longer engaged and then pull out the connector from socket. Note: The screw is self-retained in the connector and is not intended to come

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Accuracy to the Highest Degree

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Pairing with a Smart Device

From the off state, pressing the power button 🕑 will cause the Blue2 instrument to begin advertising Bluetooth Low Energy so it can be paired with a smart device running an external application. When the instrument pairs with a device, it will continuously send temperature readings to the paired device. Note: RF Range is 100 feet, line of sight

If the instrument does not pair with a device within 20 seconds, it will turn off until the power button is pressed again.

Understanding the Blinking LED

Instrument is trying to pair

Instrument is paired and continuously sending temperature data

Instrument is in light sleep mode and still paired, but not sending temperature data

Auto-Off & Sleep Mode

The auto-off interval is 5 minutes by default, but may be adjusted from 1 to 30 minutes through the software/application. Pressing the power button (1) on the instrument will restart the Auto-Off timer, keeping the instrument awake and actively sending temperatures.

If the auto-off interval elapses, the instrument will enter a light sleep mode. It can be woken up by pressing the power button.

The light sleep duration is also user-adjustable between 1 and 30 minutes. From the off state, pressing the power button on the instrument begins the connection process again, wherein it advertises for 20 seconds while waiting to pair.

If the paired smart device disconnects from the instrument, the instrument will immediately turn off.

Third Party Application Compatibility

Please contact your local Cooper-Atkins sales representative to determine if the Blue2 instrument is compatible with your application. An API document can be provided to application developers.

Warrantv

The Blue2 instrument is backed by a 5-year instrument warranty against workmanship and defects in material. Our Technical Support Department is available Monday through Friday 8:00AM to 5:00PM EST at 800-835-5011.



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Note: EMC Compliance: The Blue2 instrument may record temperature measurements beyond the stated accuracy when exposed to radio frequency disturbances between 250 Mhz and 1000 Mhz with a field strength in excess of 3.0V/m. This deviation is temporary and the Blue2 will recover when the disturbance is removed.



51337-K probe and lanyard (not shown) are not evaluated as part of this NSF-certified product.

Pairing with a Smart Device

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