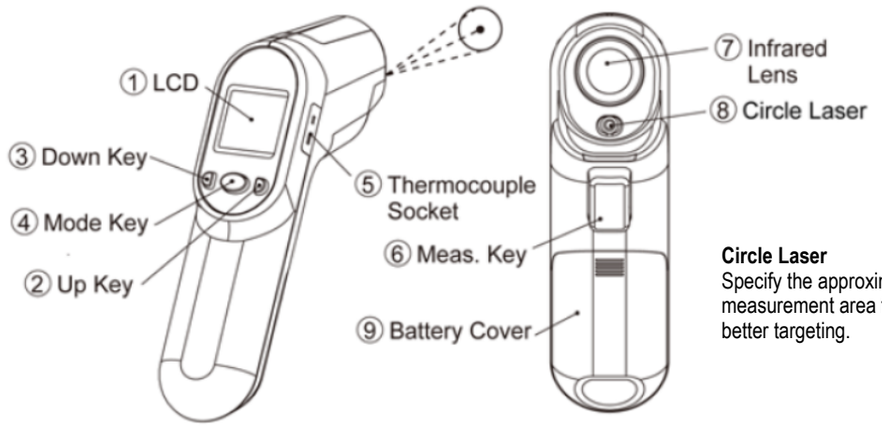
Blue Gizmo™
Your Ultimate Measuring Solution

Dual Function Infrared Thermometer
BG55

(Default Screen)



Circle Laser
Specify the approximate measurement area for better targeting.

Operating Manual

On / Off Button
To switch on the infrared thermometer, press the "Meas" key. The thermometer will automatically shut off if left idle for more than 60 secs unless in PROBE mode. (In probe mode, it will shut off if left idle for more than 12 mins).

Change Temperature Unit
Press the ▼ , to change the temperature unit. (°C / °F)

Lock Function
Press ▲ button for to on/off LOCK function. The lock mode is particularly useful for continuous monitoring temperatures for up to 60 minutes.

On / Off Laser ClassIIIa function
Press and hold "Meas" key and press the down arrow button ▼ at the same time to switch on / off laser classIIIa function.

On / Off Backlight
Press and hold "Meas" key and press the down arrow button ▲ at the same time to switch on / off backlight function .

Change Mode
Press the Mode button for more display function as follow:

E	Here will show the emissivity data. (The default emissivity is 0.95.)
▲E▼	Press "Mode" button, then press ▼ or ▲ button to set the emissivity and press "Mode" button to set the emissivity. The emissivity can be changed from 0.1 (10E) to 1 (100E).
MAX MIN dIF AVG	Press "Mode" button to change the mode for the MAX, MIN, DIF and AVG. Press the "Meas" key to take temperature measurement. Press the "Mode" button to "MAX", "MIN", "DIF" and "AVG" for the respective reading.
HAL LAL	Press "Mode" button to change the mode to High Alarm (HAL) or Lo Alarm (LAL). Press then press ▼ or ▲ button to set the HAL and LAL and press "Meas" to set it. When the reading is outside the HAL or LAL limit, the "High" or "Low" icon will flash and you will hear a beep sound.
PRB	Connect the thermocouple with thermocouple socket and put the probe in/on the targeted area, the thermometer will display the temperature automatically without pressing any button. To see the max or min reading during the probe measurement, please hold down the ▲ or ▼ button. ⚠ After measure high temperature, the proble may remain HOT for a while.

LCD ERROR MESSAGES
The thermometer incorporates visual diagnostic messages as follows:

HI / LOW	'Hi' or 'Lo' is displayed when the temperature being measured is outside of the settings of HAL and LAL
Er2 Er3 Er	'Er2' is displayed when the thermometer is exposed to rapid changes in the ambient temperature. 'Er3' is displayed when the ambient temperature exceeds 0°C (32°F) or +50°C (122°F). The thermometer should be allowed plenty of time (min 30minutes) to stabilize to the room temperature. Error 5-9 for all other error messages it is necessary to reset the thermometer. To reset it, turn the instrument off and remove the battery and wait for a minimum of one minute. Reinsert the battery and turn on.
Hi Lo	'Hi' or 'Lo' is displayed when the temperature being measured is outside of the measurement range.

BATTERIES
The thermometer incorporates visual low battery indication as follows:

'Battery OK': measurements are possible	'Battery Low': battery needs to be replaced, measurements are still possible	'Battery Exhausted': measurements are not possible

⚠ When the 'Low Battery' icon indicates the battery is low, the battery should be replaced immediately with 'AAA", 1.5V batteries.
Please note: It is important to off the instrument before replacing the battery otherwise the thermometer may mulfunction.
Dispose of used battery promptly and keep away from children.

MAINTENANCE
The thermometer should be stored at room temperature between –20 to +65 °C (-4~149°F).
The sensor lens is the most delicate part of thermometer. The lens should be kept clean at all times, care should be taken when cleaning the lens using only a soft cloth or cotton swab with water or medical alcohol. Allow the lens to fully dry before using the thermometer.
Do not submerge any part of the thermometer.

SPECIFICATION

Item	Non-contact Infrared Scan function	Thermocouple Probe Scan function (K type; probe not included)
Measurement Range	-60 to +500 °C (-76 to +932 °F)	-64 to +1400°C (-83.2 to +1999°F)
Operating Range	0 to +50°C (32 to +122°F)	
Accuracy (Tobj=15~35°C, Tamb=25°C)	±1.0°C (1.8°F)	±1% of reading or 1°C (1.8°F) whichever is greater (Test under Tamb=23±6℃)
Accuracy (Tamb=23±3°C)	Tobj=above 0: ±2% of reading or 2°C (4°F) whichever is greater Tobj=-60~0: ±(2+0.05/deg)°C	
Emissivity Range	0.95 default – adjustable 0.1 to 1 step .01	
Spectral response	8~14um spectrum	
Resolution (-9.9~199.9°C/°F)	0.1°C/0.1°F, otherwise 1°C/1°F	
Response Time (90%)	1sec	
Distance:Spot	12:1	
Battery Life	Typ.180, min 140 hours continuous use (Alkaline, without Laser and Back Light.)	
Dimensions	141.45 x 134.41 x 41.97 mm (5.57×5.29×1.65 inch)	
Weight	170 grams(6 oz) including batteries (AAA*2pcs)	
Note: Under the electromagnetic field of 3V/m from 200 to 600 MHz, the maximum error is 10 °C (18 °F).		

EMC/RFI: Readings may be affected if the unit is operated within radio frequency electromagnetic field strength of approximately 3 volts per meter, but the performance of the instrument will not be permanently affected.

CAUTION

1. Do not look directly into the laser-beam when devise is in use as will cause permanent eye damage.
2. Never point the instruments with laser on/off towards the eyes.
3. Keep out of reach of children.
4. The measure range is for thermometer only. User should choose proper p robe types for different kinds of application.
5. To avoid electric shock and thermometer damage, do not measure live circuit where voltahe exceeding 24V AC RMS or 60V DC with thermocouple probe.