

# USB-501-RCG

## Specifications



**MEASUREMENT  
COMPUTING™**

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# Specifications

All specifications are subject to change without notice.

Typical for 25 °C unless otherwise specified.

Specifications in *italic text* are guaranteed by design.

## Temperature

Table 1. Temperature specifications

Parameter	Specification
Measurement range	-20 °C (-4 °F) minimum, 60 °C (140°F) maximum
Resolution	0.1 °C (0.2 °F) typical
Accuracy (overall error)	±1 °C (±2 °F) typical

## Sampling

Table 2. Sampling specifications

Parameter	Specification
Sampling intervals	1 s, 2 s, 5 s, 10 s, 30 s, 1 min, 5 min, 15 min, 30 min, 1 h, 2 h, 6 h, 12 h
Max temperature samples	32,510
Units	°C or °F

## Alarms

Table 3. Alarm conditions

Parameter	Specification
High temperature alarm range	-20.5 °C (-5 °F) minimum, 60 °C (140 °F) maximum
Low temperature alarm range	-20.5 °C (-5 °F) minimum, 60 °C (140 °F) maximum
Alarm resolution	0.5 °C (1 °F)

## USB specifications

Table 4. USB specifications

USB-device type	USB 2.0 (full-speed)
Device compatibility	USB 1.1, USB 2.0

## Power

Table 5. Power specifications

Rechargeable Lithium-ion battery life (Note 1)	-20 °C (-4 °F) @ 1 s logging rate	1 week minimum
	20 °C (68 °F) @ 1 min logging rate	4 weeks maximum

**Note 1:** Battery operates best at temperatures between 10 °C and 30 °C (50 °F and 86 °F). Only recharge battery in an environment within this temperature.

## Environmental

Table 6. Environmental specifications

Moisture and dust protection	Protective cap installed	IP67
Operating temperature range	-20 °C (-4 °F) minimum, 60 °C (140 °F) maximum	
Corrosion protection	Protective cap installed	Stainless steel housing, 316 grade

## LED flashing modes

Table 7. LED functions

Parameter	Condition	Specification
Green LED	Flashes once every 10 seconds	Currently logging, no alarm
	Flashes once every 20 seconds	Low battery recharge immediately, no alarm
	Flashes twice every 20 seconds	Memory full, no alarm, no more readings stored
	Flashes once every 30 seconds	Logging to start at set date and time
Red LED	Flashes once every 10 seconds	Currently logging, low alarm condition (Note 2)
	Flashes twice every 10 seconds	Currently logging, high alarm condition (Note 2)
	Flashes once every 20 seconds	Low battery, recharge immediately. Low alarm from last reading
	Flashes twice every 20 seconds	Low battery, recharge immediately. High alarm from last reading
Both LEDs flash simultaneously	Both LEDs alternately flash once every 20 seconds.	Memory full, low or high alarm reading stored (Note 3)
No LEDs flash		Logger not set up or battery depleted.

**Note 2:** If both alarms have Hold selected, the LED indicator only applies to the first alarm condition detected.

**Note 3:** Only possible if Hold is selected for an alarm.

## Mechanical

Table 8. Mechanical specifications

Dimensions	92.7 mm long x 19.8 mm wide x 19.8 mm high (3.65 in. long x 0.78 in. wide x 0.78 in. high)
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