

USB-505

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.

Voltage input

Table 1. Voltage input specifications

Parameter	Specification
Voltage input range	3 VDC minimum, 24 VDC maximum
"Volt free contacts" voltage	2.75 V minimum, 3.6 VDC maximum Voltage decreases as battery discharges.

Voltage input range

The USB-505 includes a software-selectable voltage input range. Each input range has a different high and low trigger voltage, which is the voltage at which the logger considers a signal to be high or low.

Table 2. Voltage input specifications

Voltage input range	Low trigger voltage	High trigger voltage
0 -3 V	0.8 V	2 V
0 -5 V	1.3 V	3.4 V
0 - 12 V	3.2 V	8 V
0 -24 V	6.4 V	16 V

Current

Table 3. Current specifications

Parameter	Specification
"Volt free contacts" current	35 μ A typical

Sampling

Table 4. Sampling specifications

Parameter	Specification
Time between events	200 ms minimum
Time between state changes	500 ms minimum
Time between event counts	<ul style="list-style-type: none">▪ 10 ms minimum with red LED disabled▪ 50 ms minimum with red LED enabled
Maximum event or state change samples	32,510
Timing accuracy*	\pm 3 s per day at 20 °C

USB specifications

Table 5. USB specifications

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

Power

Table 6. Power specifications

½AA 3.6V Lithium battery life	@ 1 event every 5 min at 20°C in Voltage input mode	1 year typical
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Environmental

Table 7. Environmental specifications

Operating temperature range	-35 °C (-31 °F) minimum, 80 °C (176 °F) maximum
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LED flashing modes

Table 8. LED functions

Parameter	Condition	Specification
Green LED	Flashes once every 10 seconds	Currently logging.
	Flashes once every 20 seconds	Low battery, replace battery immediately.
	Flashes twice every 20 seconds	Memory full, no more readings stored
Red LED	Flashes to indicate an event occurred	Recording an event, state change, or count.
No LEDs flash		Logger stopped or battery depleted

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

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