

Test Report

Requirement/Criteria	Desired Value	Test Result	Recorded Value
TS-EE-1007	Cable is 2.0 ± 0.1 m	pass	Sensor 1: 1.98 m Sensor 2: 1.96 m
TS-EE-1004 TS-EE-1005	Bounces without breaking and not damaged in ice water	pass	NA
TS-EE-1004	Box can withstand drop from table and be turned upside down	pass	NA
TS-EE-1004	Cables do not break when box is dropped	pass	NA
TS-EE-1003	Box operates normally when sensors are unplugged	pass	“unplugged” displays for all sensors when unplugged
TS-EE-1002	When the switch is off, the display and website do not list temperature data	pass	“System Off” on the GUI is visible and display is off
TS-EE-1006	When the switch is on, all physical components should work, and the website should display temperature data	pass	NA
TS-SW-1002	Physical display should update temperature data within 20ms delay of receiving the data from sensors	pass	NA

TS-SW-1003	Screen displays correct information based on the button(s) being pressed	pass	NA
TS-SW-1004	If sensor is disconnected, display shows an error message	pass	NA
TS-EE-1001	Third box is powered by a battery and switch	pass	Box uses 2 3.6V batteries in series to power the circuit
TS-EE-1002	When switch is toggled off, the box is powered down	Pass	Entire circuit turns off when the switch is flipped off
TS-SW-1001	Displays data from two temperature sensors on a GUI and physical display	pass	Data is visible.
TS-SW-1005	When no power being supplied into system the GUI displays “System off”	pass	“System Off” visible as power is cut to the board.
TS-SW-1006	Display last 300 seconds of data and it goes. Data crosses from right to left.	pass	Data is plotted for valid values for all sensors. Graph is valid for last 300 seconds of data. Data scrolls in all these cases.
TS-SW-1007	Graphical UI plots data when the sensor is disconnected, powered off, or if the system is not supplying power. Graphical UI keeps scrolling the old-	pass	Plotted data stopped only when the sensors were unplugged, powered off, or system was powered off.

	time data if sensor disconnected or etc.		
TS-SW-1008	Contain buttons to let the user control Celsius and Fahrenheit.	pass	NA
TS-SW-1009	GUI lets users select SMS/Email thresholds for each individual sensor including sends message when threshold is broken.	pass	Test email was sent and visible in user's inbox
TS-SW-1010	System connects to the internet, allowing access to the GUI and sensor data from any remote location.	pass	NA
TS-EE-1005	Temperature sensors within $\pm 2^{\circ}\text{C}$ when in ice water and $\pm 4^{\circ}\text{C}$ at room temperature	pass	Room temperature was roughly 23°C and sensor read 22.35°C . Ice water was roughly 0°C and sensor read 0.34°C .