

USER MANUAL

EMEILCD, EMEILCDTH

ALERTWERKS LCD DISPLAY



BLACK BOX®

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

The EME1LCD and EME1LCDTH sensors plug into any AlertWerks Plus wired gateway and can be programmed to display the data from other physical and virtual sensors.

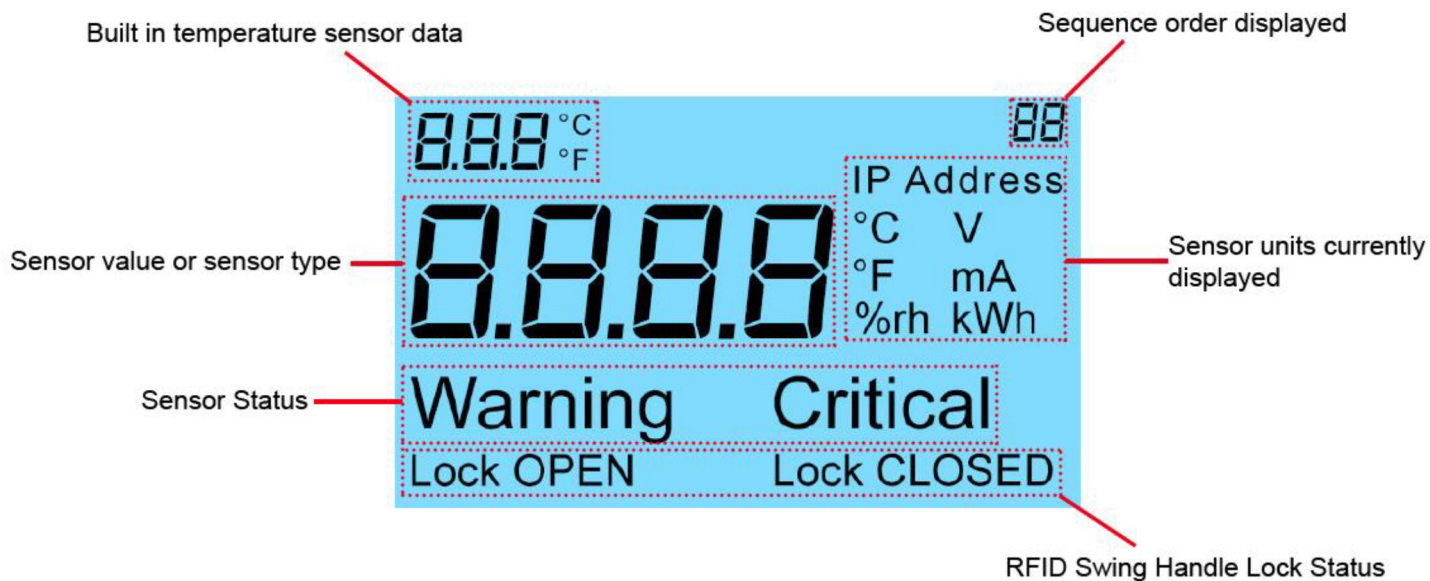


FIGURE 1-1: SENSOR INFORMATION SCREEN

1.1.1 FEATURES:

- ♦ EASY TO READ, HIGH QUALITY BACKLIT LCD DISPLAY
- ♦ CONNECTS TO AVAILABLE SENSOR PORT ON ALERTWERKS PLUS WIRED GATEWAYS
- ♦ PROGRAM TO DISPLAY SPECIFIC SENSORS
- ♦ KEYHOLE MOUNTING
- ♦ LED STATUS INDICATOR FOR CRITICAL AND WARNING SENSOR STATUSES
- ♦ BUILT-IN TEMPERATURE SENSOR
- ♦ DISPLAYS THE BASE UNIT'S IP ADDRESS



CHAPTER 1: INTRODUCTION

1.1.2 DISPLAYING THE IP ADDRESS:

When the LCD Sensor is plugged into the unit the first time, or if the Reset button is pressed once on the base unit, it will display the unit's IP address (by digits, one at a time).

NOTE: Only press the Reset button once; do not hold it in.



CHAPTER 2: SENSOR CONFIGURATION

2.1 SENSOR CONFIGURATION

Plug in the sensor using an available sensor port. Then open the base unit's Web UI and navigate to the Sensors list, as shown in Figure 2-1.

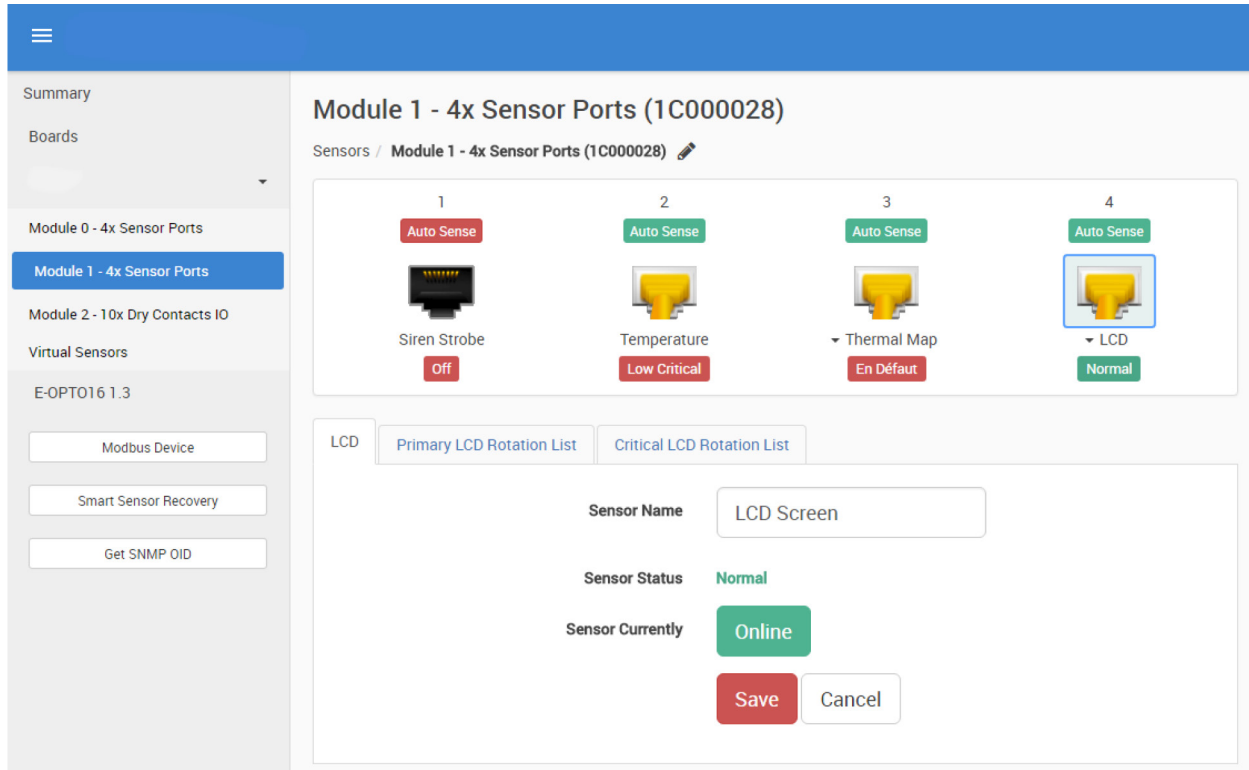


FIGURE 2-1: SENSORS LIST

NOTE: This sensor is not configurable directly from the EMEMS platform. The configuration option will redirect to the unit's Web UI where the sensor is connected to. This is similar to the older AlertWerks hubs.



CHAPTER 2: SENSOR CONFIGURATION

Now you can define the display rotation list that will be displayed on the LCD. The Primary Rotation List, shown in Figure 2-2, is what will be normally displayed on the screen.

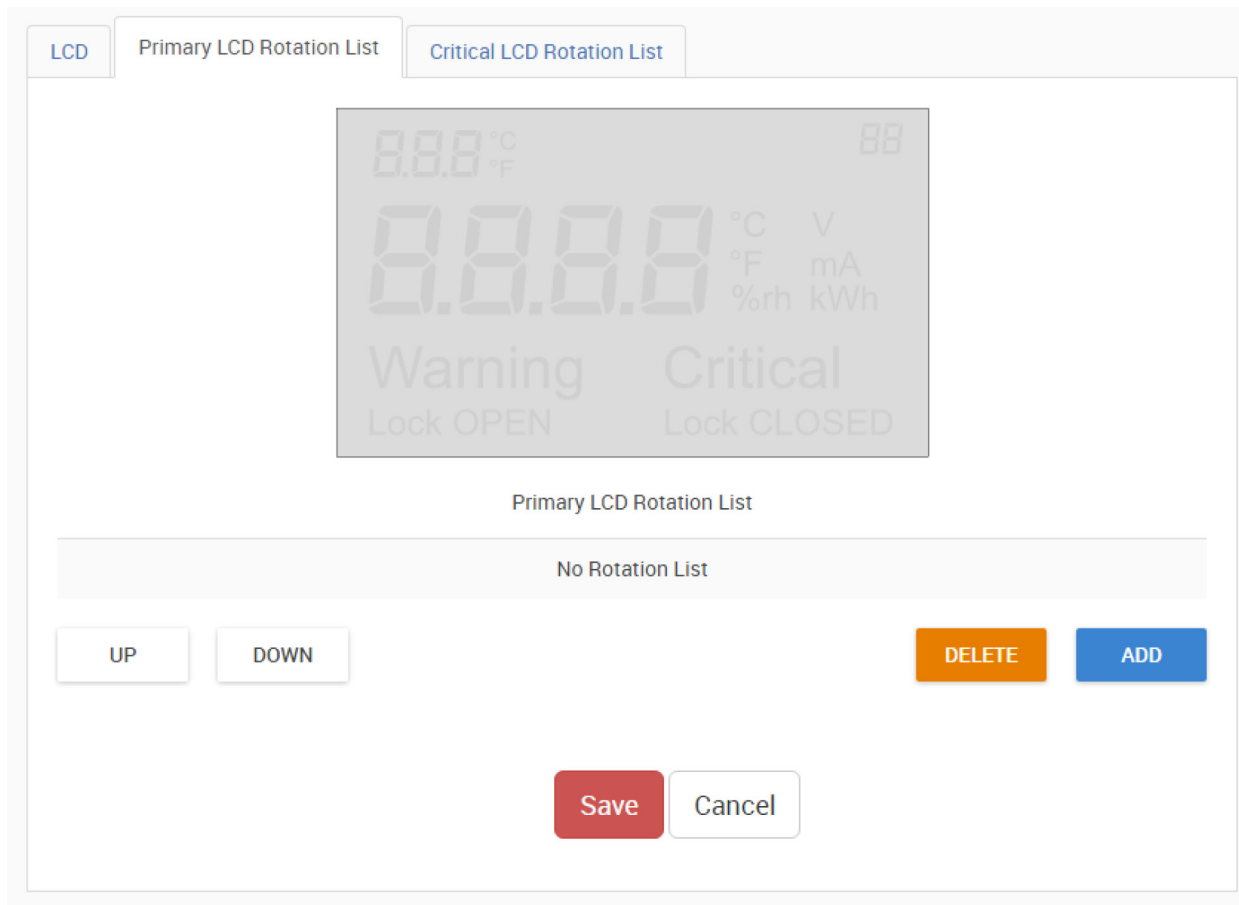


FIGURE 2-2: PRIMARY LCD ROTATION LIST SCREEN

CHAPTER 2: SENSOR CONFIGURATION

Click on the “Add” button, as shown in Figure 2-3, and add a sensor for which you want a status displayed on the LCD. Repeat, as needed.

NOTE: You can only select the sensors which are already connected to the unit.

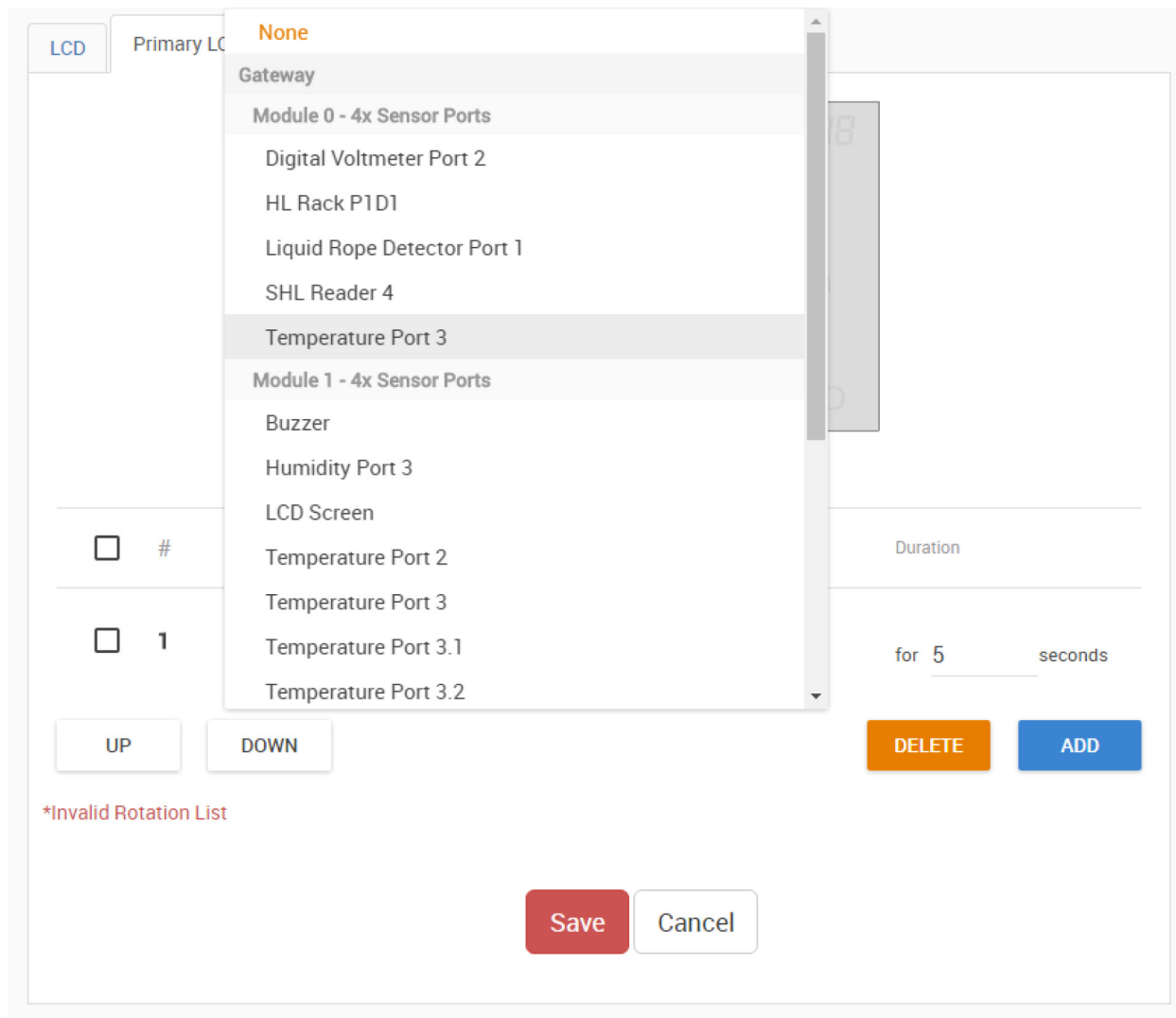


FIGURE 2-3: ADD SENSOR SCREEN



CHAPTER 2: SENSOR CONFIGURATION

For each sensor, you can define the duration of the display, as shown in Figure 2-4, before it will switch to the next sensor status display.

The screenshot displays a configuration interface for an LCD. At the top, there are three tabs: "LCD", "Primary LCD Rotation List", and "Critical LCD Rotation List". The "Primary LCD Rotation List" tab is active. Below the tabs is a preview of the LCD display showing various sensor readings and status indicators. Below the preview is a table titled "Primary LCD Rotation List" with the following columns: a checkbox, a number "#", "Display Sensor", and "Duration". The table contains one entry: a checked checkbox, the number "1", "Module 1 - 4x Sensor Ports" (with a dropdown arrow), "Temperature Port 2", and "for 5 seconds". Below the table are buttons for "UP", "DOWN", "DELETE", and "ADD". At the bottom center are "Save" and "Cancel" buttons.

<input type="checkbox"/>	#	Display Sensor	Duration
<input checked="" type="checkbox"/>	1	Module 1 - 4x Sensor Ports Temperature Port 2	for 5 seconds

FIGURE 2-4: SCREENSHOT SHOWING DURATION OPTION

CHAPTER 2: SENSOR CONFIGURATION

The preview screen, shown in Figure 2-5, will show you how the configured display will look like, with the actual sensor reading and status value.

The small index counter on the top right corner of the LCD screen shows the sensor's order number in the list. You can reorder the sensors by selecting them and clicking on the Up/Down buttons accordingly.

After you save your configuration, it will be uploaded to the sensor.

NOTE: This process takes a few seconds to complete.

The screenshot shows a web interface for configuring an LCD display. At the top, there are three tabs: "LCD", "Primary LCD Rotation List", and "Critical LCD Rotation List". The "LCD" tab is active, displaying a preview of the LCD screen. The preview shows a digital display with a temperature reading of 88.8°F, a voltage reading of 4.6V, and a status indicator that says "Critical". Below the preview is a table titled "Primary LCD Rotation List" with columns for "Display Sensor" and "Duration". The table contains two entries: "Temperature Port 2" and "Digital Voltmeter Port 2", both with a duration of 5 seconds. Below the table are buttons for "UP", "DOWN", "DELETE", and "ADD". At the bottom of the interface are "Save" and "Cancel" buttons.

<input type="checkbox"/>	#	Display Sensor	Duration
<input type="checkbox"/>	1	Module 1 - 4x Sensor Ports Temperature Port 2	for 5 seconds
<input type="checkbox"/>	2	Module 0 - 4x Sensor Ports Digital Voltmeter Port 2	for 5 seconds

FIGURE 2-5: PREVIEW SCREEN

CHAPTER 2: SENSOR CONFIGURATION

There is also a Critical Rotation List configuration, shown in Figure 2-6, which will be used when one of the monitored sensor's status is in a warning or critical state.

IMPORTANT: The Critical Rotation List will override the Primary Rotation List if a sensor's status is warning or critical, and it will only display those sensor statuses.

The display configuration is the same as for the Primary Rotation List, but you can also define a blinking rate value (slow or fast) to emphasize the value reading that is being displayed.

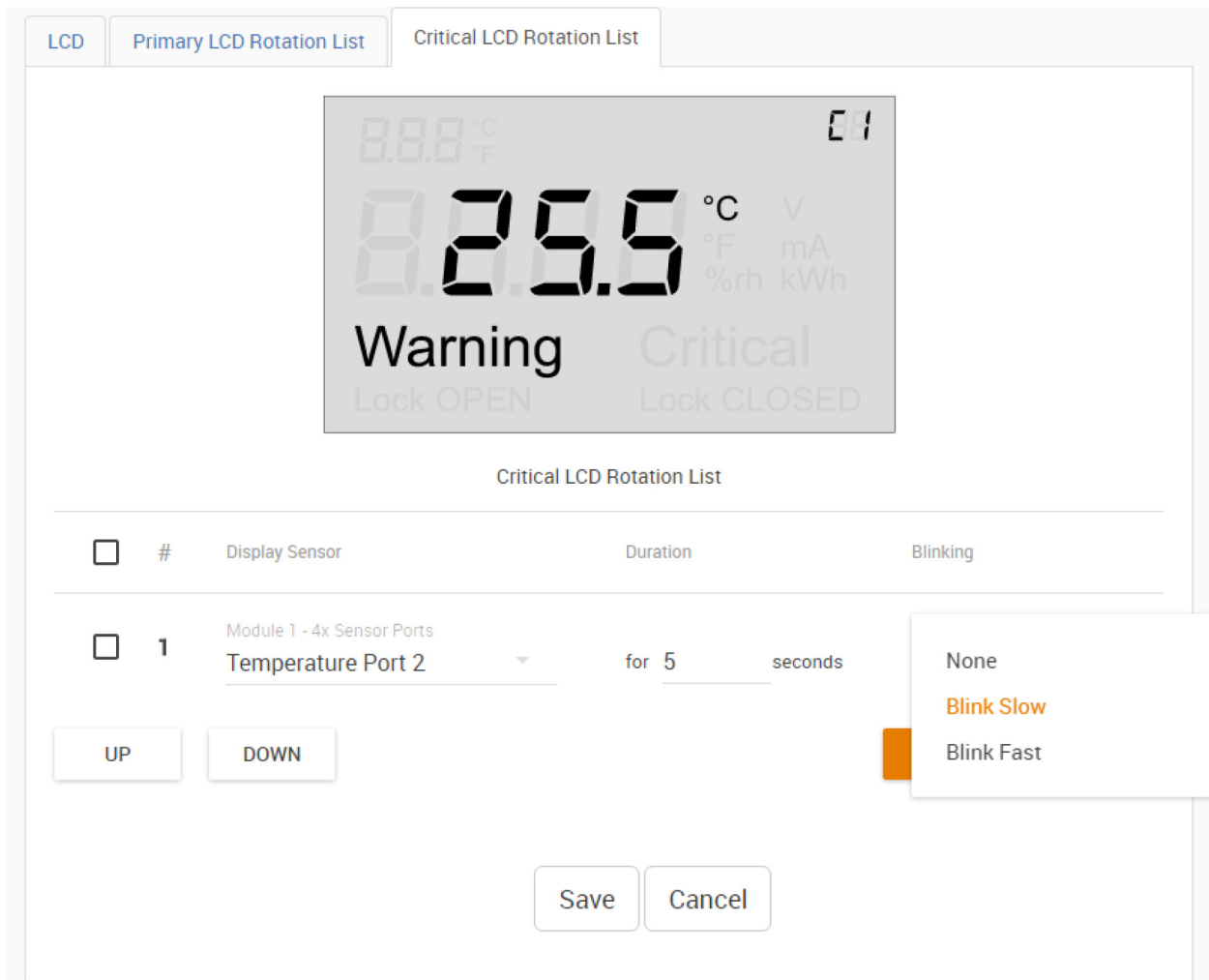


FIGURE 2-6: CRITICAL LCD ROTATION LIST SCREEN

CHAPTER 2: SENSOR CONFIGURATION

2.1.1 BUILT-IN TEMPERATURE SENSOR

The LCD Sensor's built-in Temperature Sensor is selectable from the same sensor port.

Its configuration, shown in Figure 2-7, is the same as the standard Temperature Sensor's configuration, and it can be used by notifications.

This sensor's reading will always be displayed on the top left corner of the LCD screen. It can't be turned off.

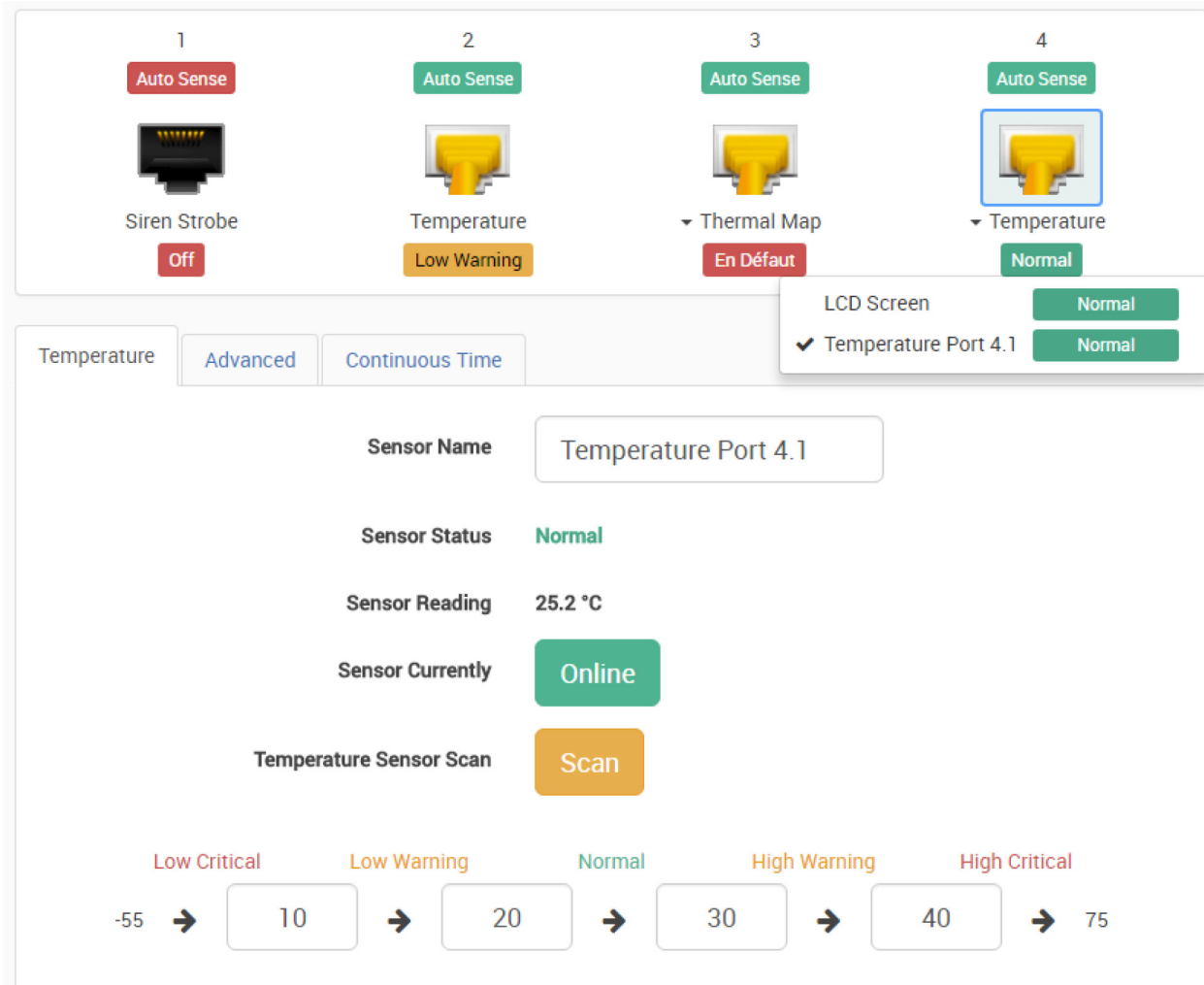


FIGURE 2-7: TEMPERATURE SENSOR CONFIGURATION SCREEN



CHAPTER 3: LCD DISPLAY SENSORS

3.1 LCD DISPLAY SENSOR TYPES

Switch type sensors that have no unit values are displayed as a sensor type. The following list provides a definition of the sensor mapped to a specific sensor type. Examples can be seen on the following page.

ST-01 - Airflow

ST-02 - Dry Contact I/O

ST-03 - Dry Contact Input

ST-04 - Motion Detection

ST-05 - Water Sensor

ST-06 - Security Sensor

ST-07 - Siren and Strobe

ST-08 - Sensor Controlled Relay

ST-09 - AC Voltage Sensor

ST-10 - 8x Sensor Controlled Relay

ST-11 - Smoke Detector

ST-12 - 8 Dry Contact I/O

ST-13 - Rope Water Sensor

ST-14 - 5 Input Dry Contact

ST-15 - Circuit Breaker Status

ST-16 - Handle Lock Status

ST-17 - Handle Reader Status

ST-18 - Dummy Outlet



CHAPTER 4: LCD DISPLAY

4.1 EXAMPLES OF LCD DISPLAY PROGRAM

Through the AlertWerks Wired web interface the LCD display is programmed to display the sensors that you wish to view and the sequence in which they are displayed. Figure 4-1 shows a series of 4 sensors with their status displayed.

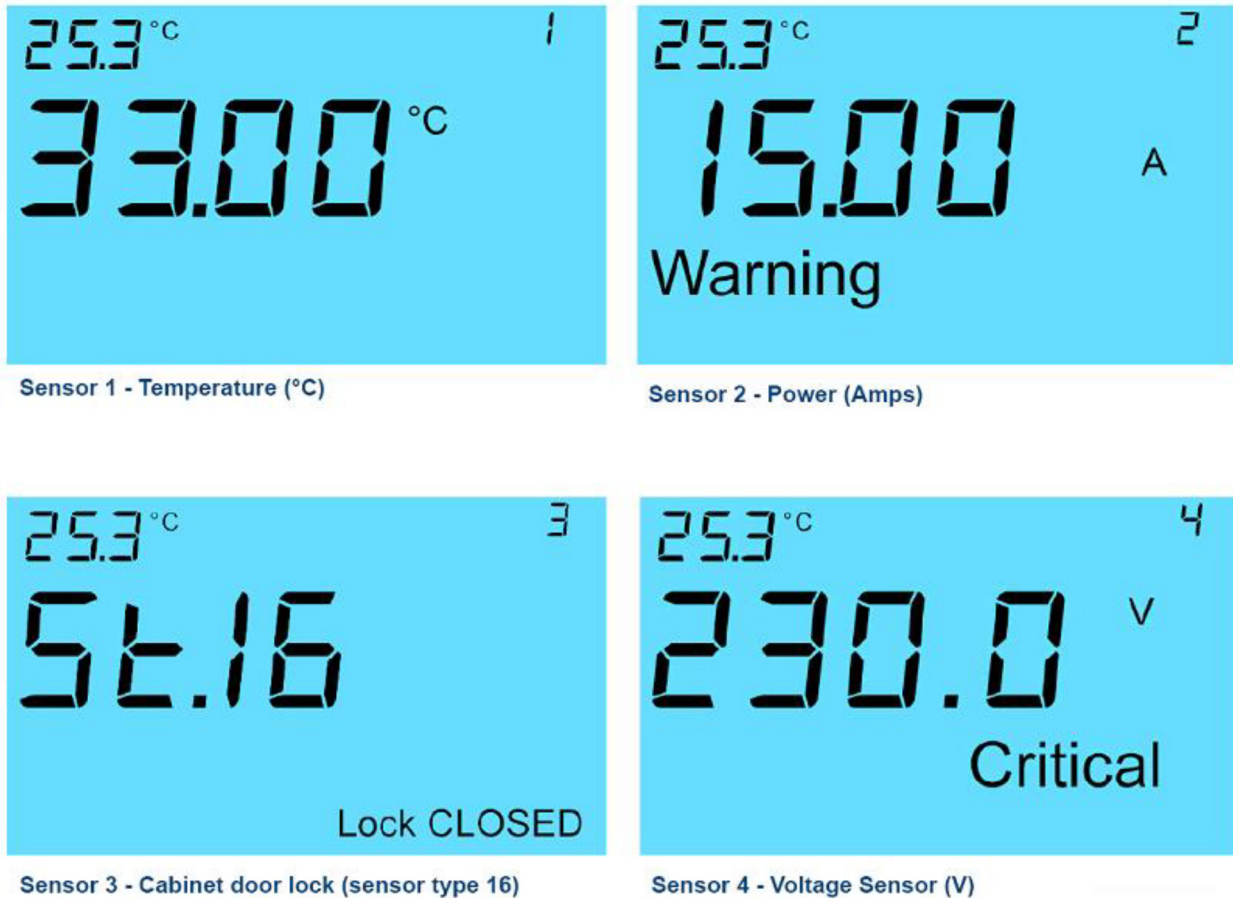


FIGURE 4-1: LCD DISPLAY EXAMPLES

CHAPTER 4: LCD DISPLAY

4.2 GLOBAL STATUS LEDS

The LCD Sensor has two specific status LEDs (yellow and red), which will light up and blink if a monitored sensor's status is warning or critical, respectively. Figures 4-2, 4-3, 4-4, and 4-5 provide examples of the LED lights when inactive and active.



FIGURE 4-2: EXAMPLE WITH LED LIGHTS OFF



FIGURE 4-3: EXAMPLE OF SENSOR IN CRITICAL STATE (RED LED BLINKING)



FIGURE 4-4: ANOTHER EXAMPLE WITH LED LIGHTS OFF



FIGURE 4-5: EXAMPLE OF SENSOR IN WARNING STATE (YELLOW LED BLINKING)

CHAPTER 5: TECHNICAL DRAWING

5.1 TECHNICAL DRAWING

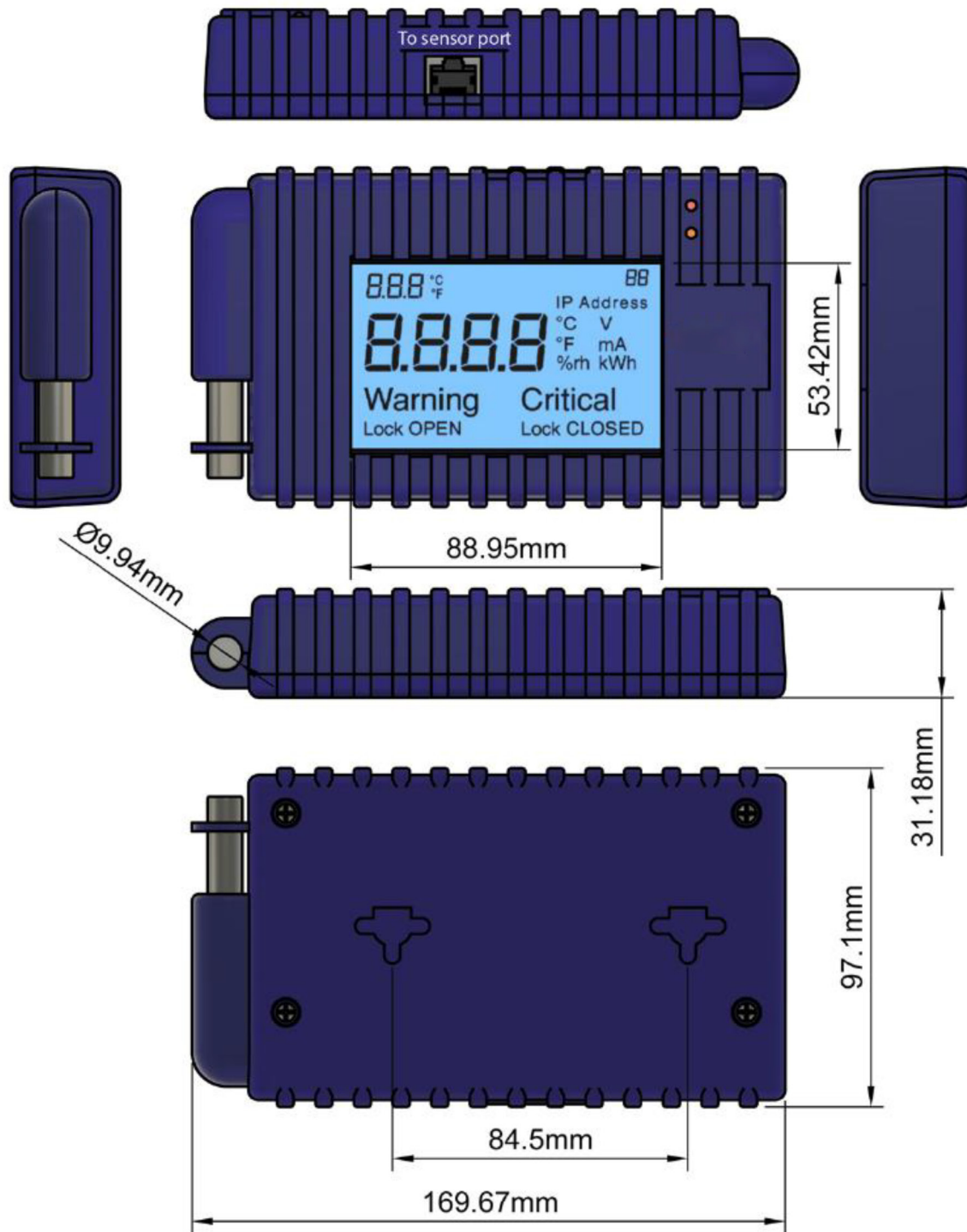


FIGURE 5-1: TECHNICAL DRAWING

CHAPTER 6: SPECIFICATIONS

TABLE 6-1. SPECIFICATIONS

SPECIFICATION	DESCRIPTION
Power Input	TYPICALLY 45MA, 0.22W
Power Consumption	< -80dB@0dBFS 1kHz (A-wt)
Display	<ul style="list-style-type: none">◆ Continuous embedded temperature display◆ Display up to 8 sensors in standard rotation list, configured via SP+ web interface with preview◆ 2 global status LEDs◆ Display sensor status: Warning or Critical◆ Display sensor units: °C, °F, %rh, %, V, (m)A, (k)W, (k)Wh◆ Display the base unit's IP address when plugged in or Reset is pressed shortly◆ Display swing handle lock status: Open or Closed



APPENDIX A: REGULATORY INFORMATION

A.1 FCC STATEMENT

This equipment has been tested and found to comply with the regulations for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this Quick Installation Guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case, the user will be required to correct the interference at his/her own expense.

A.2 CE STATEMENT

This is a Class B product in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

A.3 ROHS

This product is RoHS compliant.



APPENDIX A: REGULATORY INFORMATION

A.4 NOM STATEMENT

1. Todas las instrucciones de seguridad y operación deberán ser leídas antes de que el aparato eléctrico sea operado.
2. Las instrucciones de seguridad y operación deberán ser guardadas para referencia futura.
3. Todas las advertencias en el aparato eléctrico y en sus instrucciones de operación deben ser respetadas.
4. Todas las instrucciones de operación y uso deben ser seguidas.
5. El aparato eléctrico no deberá ser usado cerca del agua—por ejemplo, cerca de la tina de baño, lavabo, sótano mojado o cerca de una alberca, etc.
6. El aparato eléctrico debe ser usado únicamente con carritos o pedestales que sean recomendados por el fabricante.
7. El aparato eléctrico debe ser montado a la pared o al techo sólo como sea recomendado por el fabricante.
8. Servicio—El usuario no debe intentar dar servicio al equipo eléctrico más allá a lo descrito en las instrucciones de operación. Todo otro servicio deberá ser referido a personal de servicio calificado.
9. El aparato eléctrico debe ser situado de tal manera que su posición no interfiera su uso. La colocación del aparato eléctrico sobre una cama, sofá, alfombra o superficie similar puede bloquea la ventilación, no se debe colocar en libreros o gabinetes que impidan el flujo de aire por los orificios de ventilación.
10. El equipo eléctrico deber ser situado fuera del alcance de fuentes de calor como radiadores, registros de calor, estufas u otros aparatos (incluyendo amplificadores) que producen calor.
11. El aparato eléctrico deberá ser conectado a una fuente de poder sólo del tipo descrito en el instructivo de operación, o como se indique en el aparato.
12. Precaución debe ser tomada de tal manera que la tierra física y la polarización del equipo no sea eliminada.
13. Los cables de la fuente de poder deben ser guiados de tal manera que no sean pisados ni pellizcados por objetos colocados sobre o contra ellos, poniendo particular atención a los contactos y receptáculos donde salen del aparato.
14. El equipo eléctrico debe ser limpiado únicamente de acuerdo a las recomendaciones del fabricante.
15. En caso de existir, una antena externa deberá ser localizada lejos de las líneas de energía.
16. El cable de corriente deberá ser desconectado del cuando el equipo no sea usado por un largo periodo de tiempo.
17. Cuidado debe ser tomado de tal manera que objetos líquidos no sean derramados sobre la cubierta u orificios de ventilación.
18. Servicio por personal calificado deberá ser provisto cuando:
 - A: El cable de poder o el contacto ha sido dañado; u
 - B: Objetos han caído o líquido ha sido derramado dentro del aparato; o
 - C: El aparato ha sido expuesto a la lluvia; o
 - D: El aparato parece no operar normalmente o muestra un cambio en su desempeño; o
 - E: El aparato ha sido tirado o su cubierta ha sido dañada.



APPENDIX B: TECH SUPPORT/DISCLAIMERS/TRADEMARKS

B.1 TECH SUPPORT/CONTACT INFORMATION

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