

# Battery Monitoring System

(Battery monitoring system for larger UPS systems)

## BTMS TOUCH DISPLAY MANUAL

(BM-HMI)

## Table of content

1. BTMS 7" HMI Touch display.....	3
2. Touch Panel User Interface.....	5
Data center overview.....	5
UPS overview .....	6
String detailed view .....	7

# 1. BTMS 7” HMI Touch display

Order code: BM-HMI

## Highlights & Features

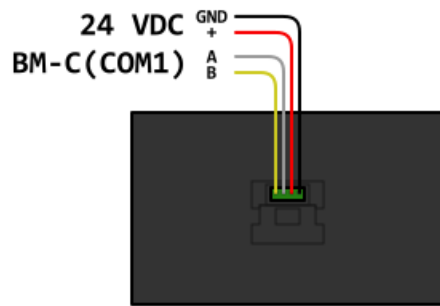


- 7” capacitive touch screen
- Supports up to in
- 8 UPSs (8 BM-C)
- 64 strings (8 BM-C × 8 BM-SS)
- 7.680 batteries (8 BM-C × 8 BM-SS × 120 BM-CS)

## Technical specification

Power supply	24 VDC, 5 W max	
Size	7“	
Resolution	1024 × 600	
Colors	65 k, 16-bit RGB	
Communication	RS 485	
	1200 - 115200 bps	
Dimensions	Width	184 mm
	Height	118 mm
	Depth	15 mm
	Max depth	23 mm

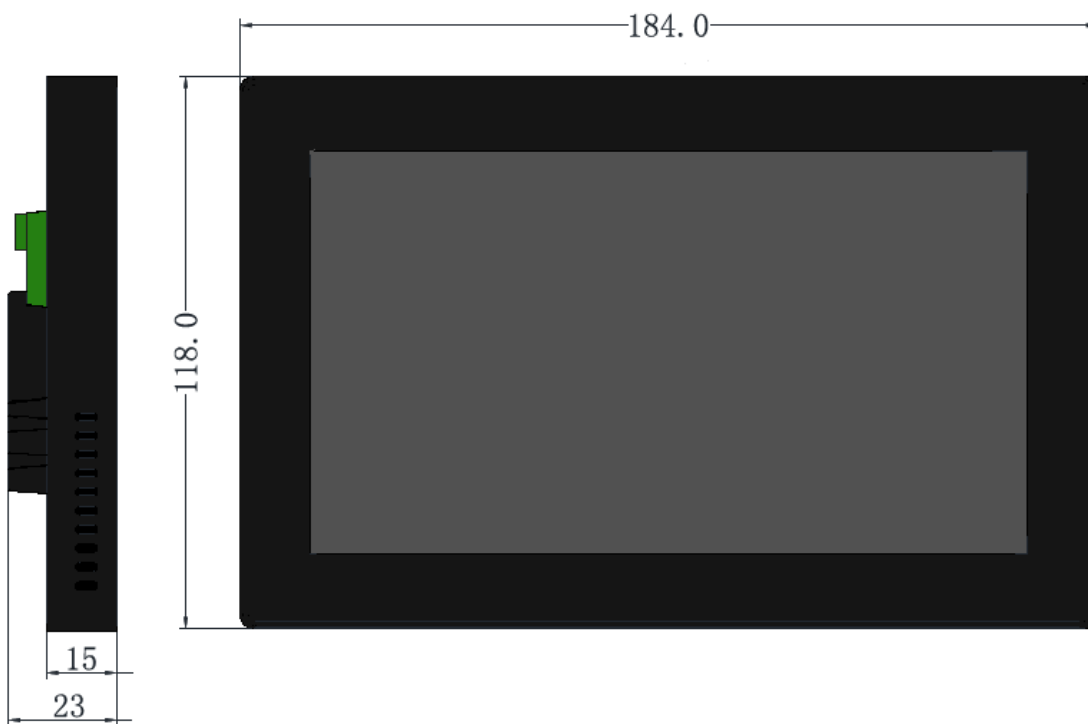
### Wiring



### Mounting

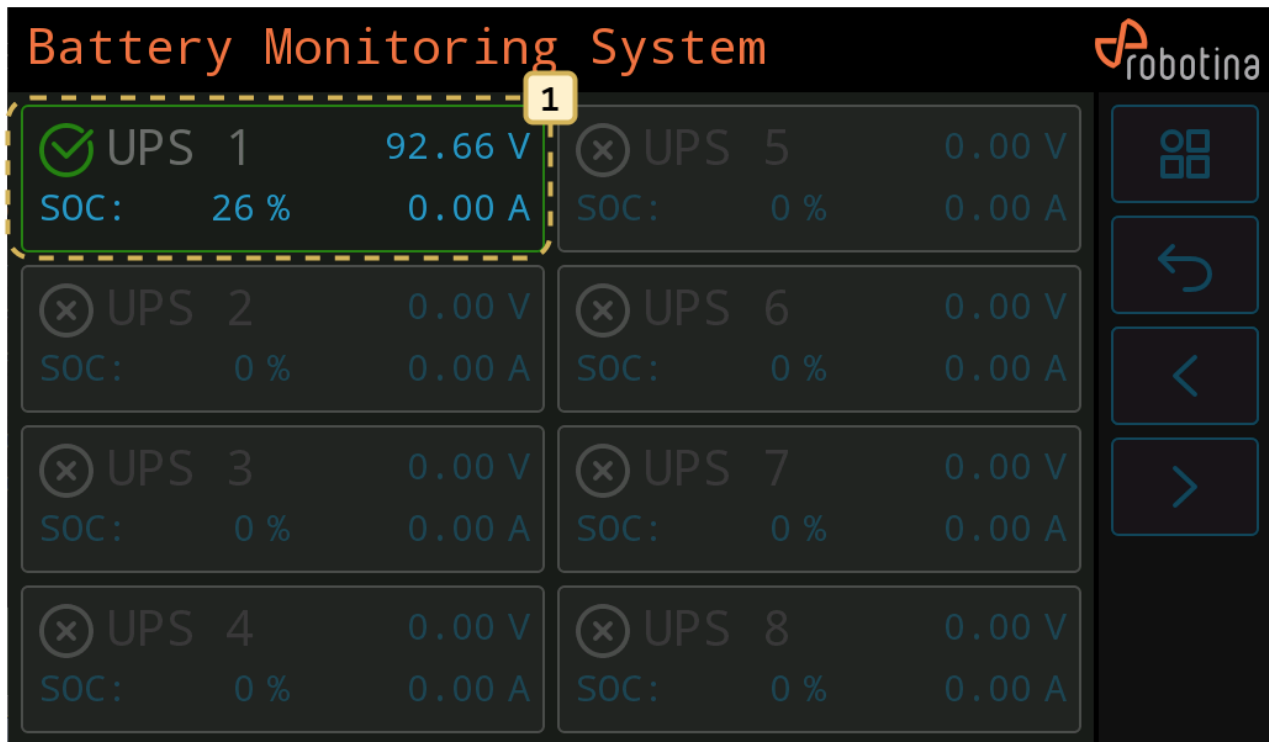
- On the wall
- On the cabinet

### Dimensions



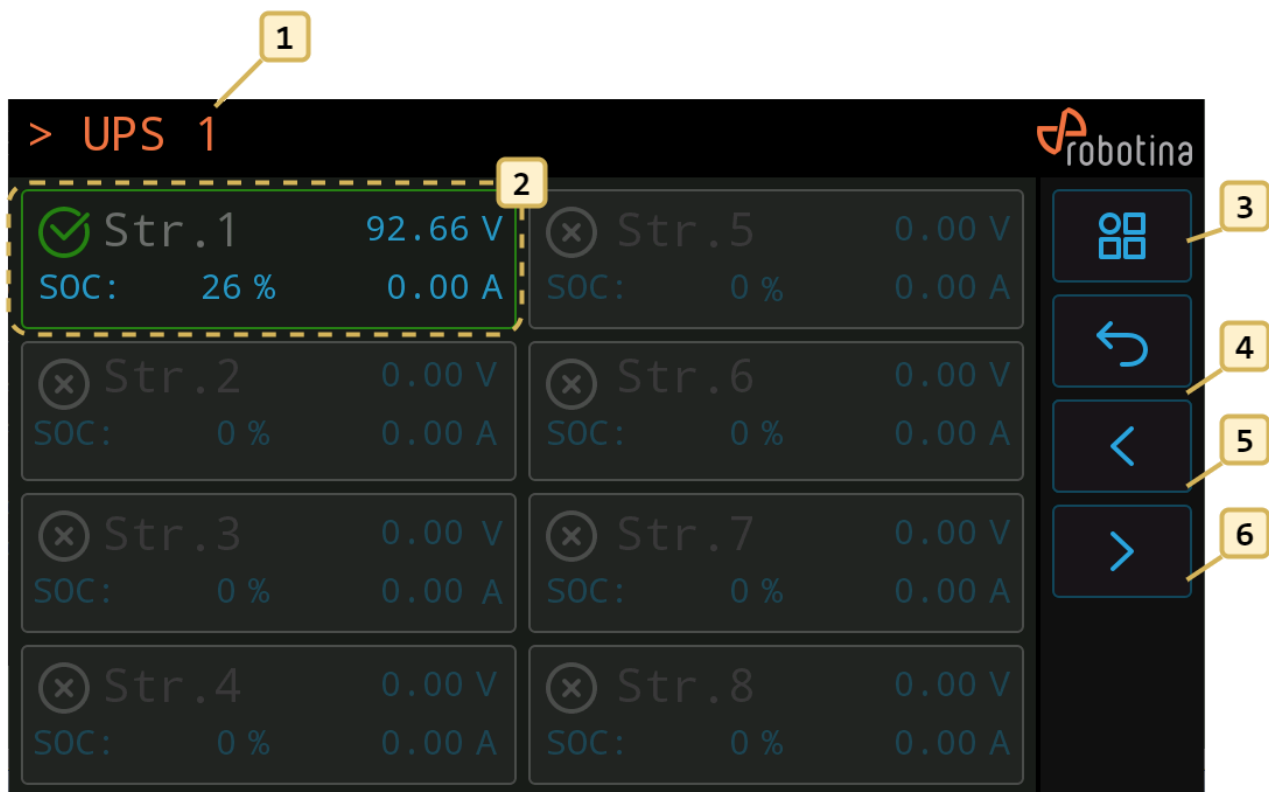
## 2. Touch Panel User Interface

### Data center overview



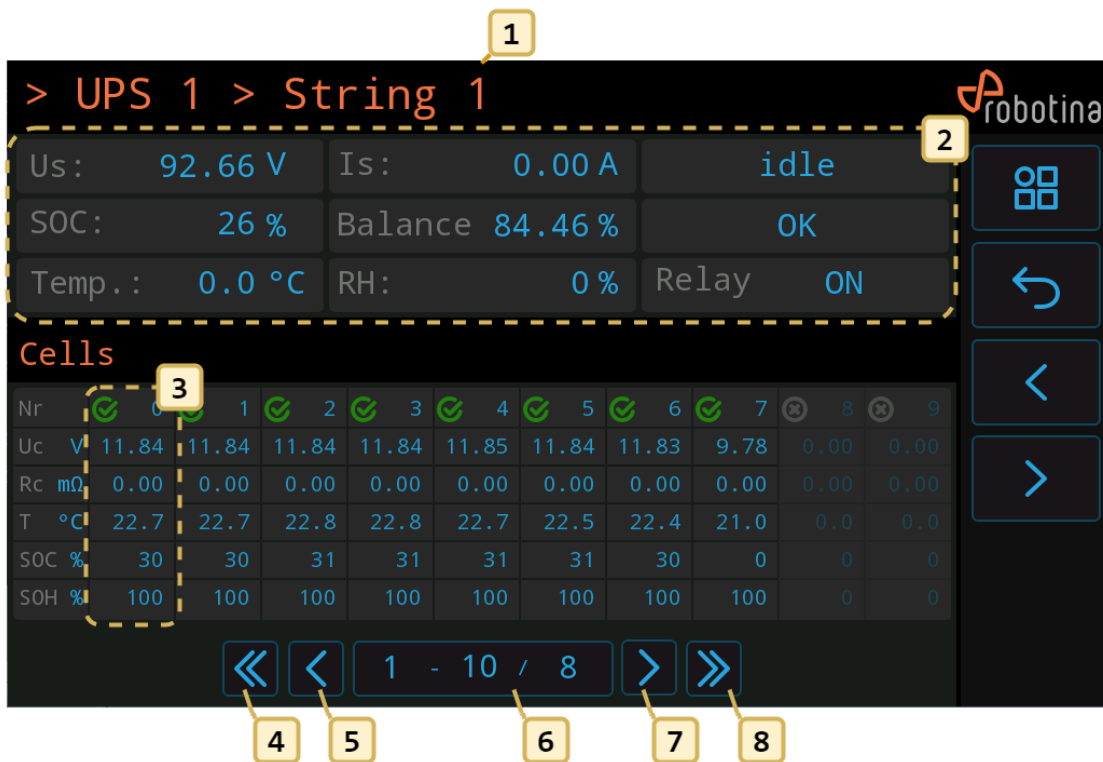
1	UPS status icon (disabled = gray X + dimmed, OK = green ✓, error = red X)
	UPS average voltage [V]
	UPS average SOC [%]
	UPS total current [A]
	Touch → go to UPS overview screen

## UPS overview



1	Displayed UPS Index
2	String status icon (disabled = gray X + dimmed, OK = green ✓, error = red X)
	String total voltage [V]
	String SOC [%]
	String current [A]
	Touch → go to String overview screen
3	Touch → go to Main screen
4	Touch → go to Previous screen
5	Touch → select Previous UPS
6	Touch → select Next UPS

## String detailed view



1	Displayed String Index
2	Selected string data
	Us (String voltage) [V]
	Is (String current) [A]
	String state (floating charge, equalizing charge, discharge, idle, abnormal)
	SOC [%]
	Balance [%]
	String status (unknown, OK, error)
	Temperature (ambient temperature) [°C]
	RH (relative ambient humidity) [%]
	Relay (relay status, ON OFF)

3	Cell data
	Icon (disabled = gray X + dimmed, OK = green ✓, error = red X) and index
	Uc (cell voltage) [V]
	Rc (cell resistance) [m ohm]
	T (cell temperature) [°C]
	SOC (Cell state of charge) [%]
	SOH (Cell state of health) [%]
4	To first cell
5	Previous 10 cells
6	Displayed cells indexes (first – last / of)
7	Next 10 cells
8	To last cell

The information in this manual is subject to change without notice. Robotina assumes no responsibility for any errors that may appear in this document.

In no case is Robotina liable for incidental or consequential damages arising from the use of this manual or the software or hardware described in this document.

This document may not be reproduced or copied without the written permission of Robotina, and the contents may not be given to a third party or used for any unauthorized purpose.