

## BCW2 Specification

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The Furukawa Battery Co., Ltd

Power supplies Develop Div.

Approved	Checked	Drawn
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## **Communications & Safety Regulation Information**

### **Compliance Statement**

The model BCW2 complies with the following standards regulating interference and EMC:

- FCC Part 15 Class B

### **Interference Statement**

This equipment has been tested and found to comply with the limits 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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

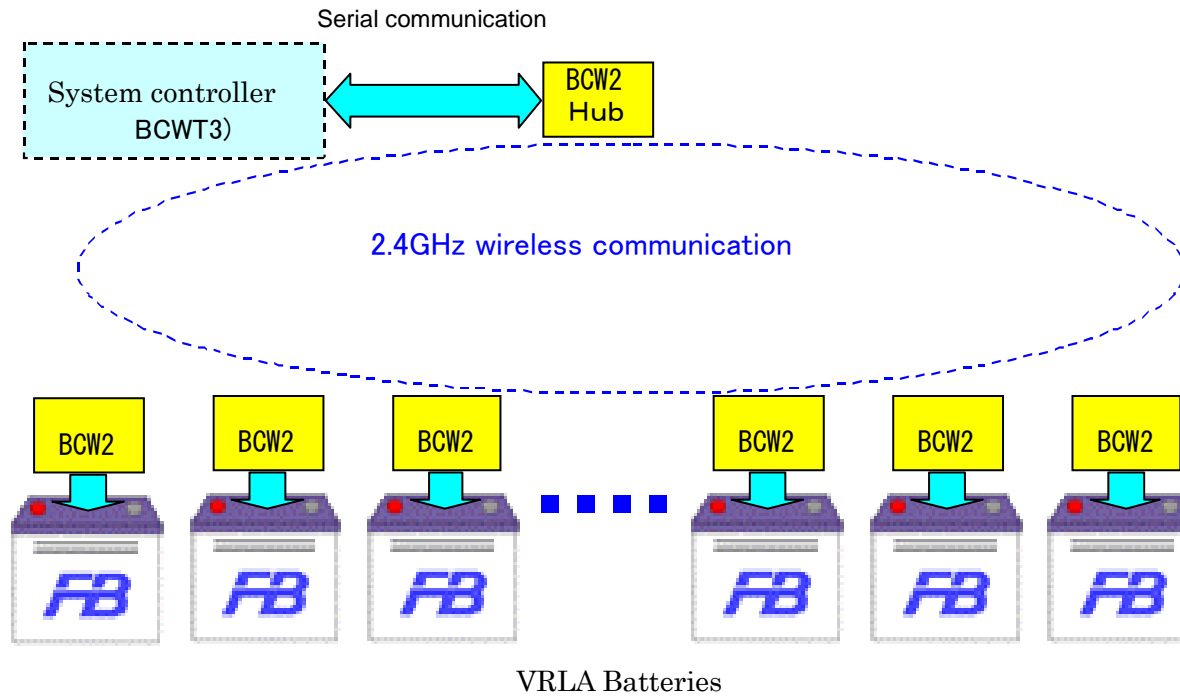
FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

## 1. Abstract

BCW2 is sensor device of 2V-Cell type VRLA Battery. This device can measure the voltage and internal resistance and temperature.

Each BCW2 communicate with BCW2Hub via radio (1/N communication) . BCW2 measurement data are provided via serial communication from BCW2Hub.

BCW2Hub can connect up to 64 BCW2.

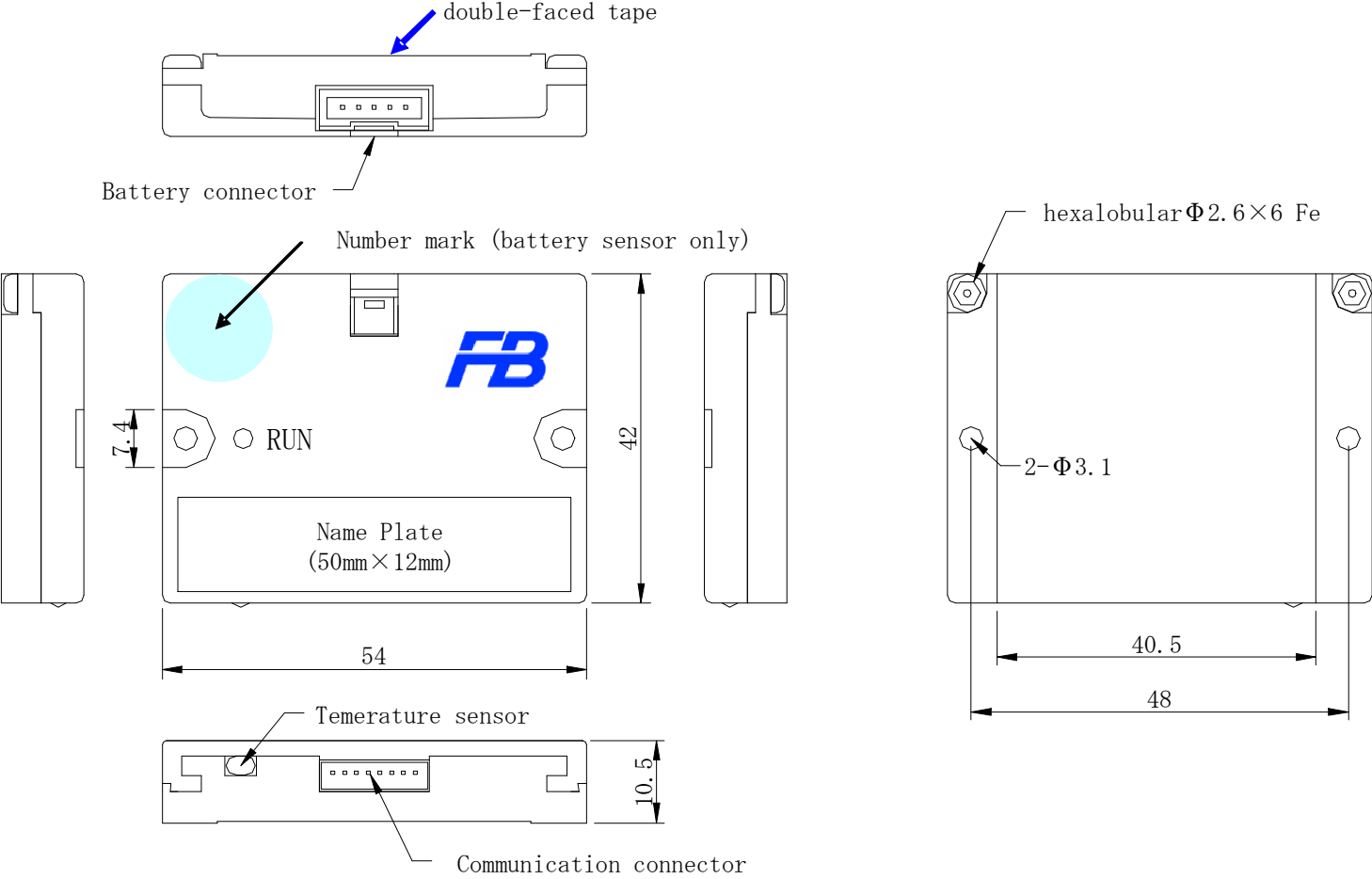


## 2.Specification

### (1)BCW2 Battery sensor mode

Entry		Specification	Remarks
Candidate Battery		2V／150～1000Ah Valve regulated Lead Acid Battery	
Measurement	Voltage	Range : 1.500～2.700V accuracy : $\pm 0.3\%$ (FSR)	
	Internal Resistance	Range : 0.100～1.500m $\Omega$ Accuracy : $\pm 5\%$ (FSR) Measurement Current : 1.5A(p-p) $\pm 10\%$	
	Temperature	Range : -10.0～0～60.0℃ Accuracy : $\pm 1.5\%$ (FSR)	
Size		W:54 mm × H:42 mm × D:10.5 mm	Without connector and screws
Weight		21g max	Without connector
Power source		Operating Voltage Range : 1.5～3.2V Average Consumption Current : Less than 5mA Average Consumption Current at the time of the internal resistance measurement : Less than 1A	Unless at the time of the internal resistance measurement
Communication	Via Radio	Frequency Range : 2404 ～ 2477 MHz (at 1 MHz intervals, 74channel) Maximum output power : 0.004 W / MHz	
Operating temperature range		0℃～50℃	
Protective function		Battery reverse connect protection	

3. View



Case material : ABS

#### 4. Connector pin assignment

Name	Pin No.	Wire color	Content	Housing
Battery connector	1	RED	Battery (+) power source cable	PAP-05V(J.S.T)
	2	WHITE —	Battery (+) measurement cable	
	3	BLACK	<No Connection>	
	4	BLUE	Battery (-) measurement cable	
	5		Battery (-) power source cable	
Communication Connector	1	BROWN	Power (+)	ZHR-8(J.S.T)
	2	RED	Reset Input (Normally Open ,reset when it connected Power(+))	
	3	—	Can't use	
	4	—	Can't use	
	5	ORANGE	Tx data	
	6	YELLOW	Rx data	
	7	—	Test input Normally->Open, Test-> Power(GND)	
	8	GREEN	Power (-)	

5.Connection

(1) BCW2 (Battery sensor mode)

