



The User Manual OF CMU

Author: Shuncheng Fei

Approval: Yao Xiong

Pan Asia Technical Automotive Center Co., Ltd. 2024.4.8





1 The Product Description

This product is used in wireless BMS system.

The main function is to collect cell voltage and module temperature, and then transmit to BRFM by wireless communication.



Picture 1. WBMS Architecture

2 Noun Interpretation

Sheet 1. Abbreviation

Abbreviation	Description
BMS	Battery Management System
BRFM	Battery Radio Frequency Module
CMU	Cell Monitoring Unit
VICM	Vehicle Integration Control Module
BDSB	Battery Distribution Sensing Board

3 Basic Parameters

Sheet 2. Parameters

Item	Feature Description
Model	СМИ
Product Name	Cell Monitoring Unit
Interface	WLAN
Supply Voltage	11V~33.6V (Normal Voltage: 29.6V)
Operating Temperature	-40°C~+85°C



泛亚汽车技术中心有限公司 Pan Asia Technical Automotive Center Co., Ltd.

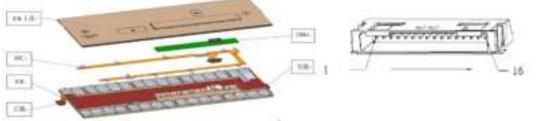
4 **RF Output Power**

Sheet 3. Power				
Item	Band	Limited Power		
WLAN	2410MHz \sim 2475MHz	<12dBm		

5 Interface definition

Sheet 4. BRFM I/O

PIN	I/O	Function Description
J1-1	NTC1-	GND
J1-2	NTC1+	Signal Collect
J1-3	V7+	Signal Collect
J1-4	V5+	Signal Collect
J1-5	V3+	Signal Collect
J1-6	V1+	Signal Collect
J1-7	V11	Signal Collect
J1-8	V12	GND
J1-9	V2+	Signal Collect
J1-10	V4+	Signal Collect
J1-11	V6+	Signal Collect
J1-12	V8+_2	Signal Collect
J1-13	V8+_1	POWER
J1-14	Empty	/
J1-15	NTC2-	GND
J1-16	NTC2+	Signal Collect



Picture 2. CMU Connector



泛亚汽车技术中心有限公司 Pan Asia Technical Automotive Center Co., Ltd.

A. Appendix

The production date of CMU can refer to the label.



Scan the QR code on the label and you will get the following information.

[>>#06#Y846020000000X#P24121366#12V654552611#T1A23205CAC000532#50S64f9c000000e4ab9#

The production date of the product is read as follows:

23 — 2023;

205 —— The 205 day.





FCC warning:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

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 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 or more 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.

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.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cmbetween the radiator and your body NOTE To

satisfy FCC exterior labeling requirements, the following text must be placed on the exterior of the end product Contains Transmitter module FCC ID: 2BNQR-CMU