



FEATURES

- BCU for BBU shelf
- Communicates with BBU via RS485
- Communicates with RMU via PMBus™
- RJ45 connector provided for maintenance
- LED Status Indicators provided
- Hot swappable

PRODUCT OVERVIEW

MWBB-BCU battery control unit (BCU) provides monitoring and control functions for [Battery Backup Units](#) (BBUs) installed within the [MWBBES-212](#) series battery shelves and communicates via PMBus™ with the [Remote Management Unit](#) (RMU). MWBB-BCU includes status LED indicators, is hot swappable and provides detailed communication and reporting for datacenter applications, via the RMU.

ORDERING GUIDE

Part Number	Description
MWBB-BCU-1	Battery Control Unit (BCU) for MWBBU series, battery shelves

RJ45 INTERFACE

Port	Spec.	Usage
1	Serial console (RS-232C)	CLI

FUNCTION AVAILABLE WITH BCU

Application	Action	Description
CLI (BCU)	Control the unit	<ul style="list-style-type: none"> ■ Selection of the mode of BBU (Charge enable /Discharge enable /Peak assist /Sleep) ■ Setting charging rate ■ Setting threshold power of peak assist
	Reporting	<ul style="list-style-type: none"> ■ Mode of each BBU. ■ Presence information of each unit ■ Fault information of each BBU ■ Input/output power of BBU(s) ■ SOC of each BBU

FUNCTION AVAILABLE WITH BCU VIA RMU

Application	Action	Description
SNMP (RMU)	Reporting	<ul style="list-style-type: none"> ■ Mode of each BBU ■ Presence information of each unit ■ Fault information of each BBU ■ Input/output power of BBU(s) ■ SOC of each BBU
CLI (RMU)	Control the unit	Same as CLI (BCU)
	Reporting	Same as CLI (BCU)
Web GUI (RMU)	Reporting	Some battery status (SOC, input and output power of battery) can be monitored by graph.



The Open Community mark is owned by and used with the permission of the Open Compute Project Foundation

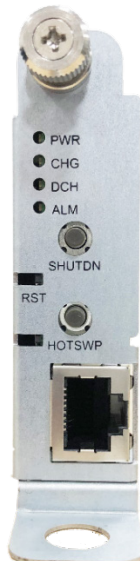


For full details go to:
www.murata-ps.com/rohs

ENVIRONMENTAL CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
Storage temperature range		-40		70	°C
Operating temperature range		0		40	°C
humidity	Storage, non-condensing	5		90	%
	Operating, non-condensing	5		85	%
Operating altitude				3,000	m
MTBF	Per Telcodia SR-332 M1C1 @40°C	400k			hrs
Weight			210		g
Shock	30G, non-operating.				
Vibration	Random vibration, 5-500Hz 1.11G, non-operating.				
Safety	RoHS				

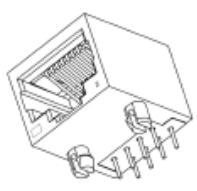
STATUS INDICATION AND CONTROL SIGNAL

Front Panel View, BCU	Led	Label	Function	Status and Indication
	1	PWR	Power	Solid Green: BCU ON and/or successful BCU reset
	2	CHG	Charge	Solid Green: Charging Blinking Green: Acceptable of Charge Blinking rate: 2s / 25% duty-cycle OFF: Charge prohibited
	3	DCH	Discharge	Solid Green: Discharging Blinking Green: Acceptable of Discharge Blinking rate: 2s / 25% duty-cycle) OFF: Discharge prohibited
	4	ALM	Alarm	Solid Amber: Primary protection or less alarm is activated within BBU and/or BCU Blinking Amber: Secondary protection is activated within BBU Blinking rate: 2s / 25% duty-cycle OFF: No alarm conditions

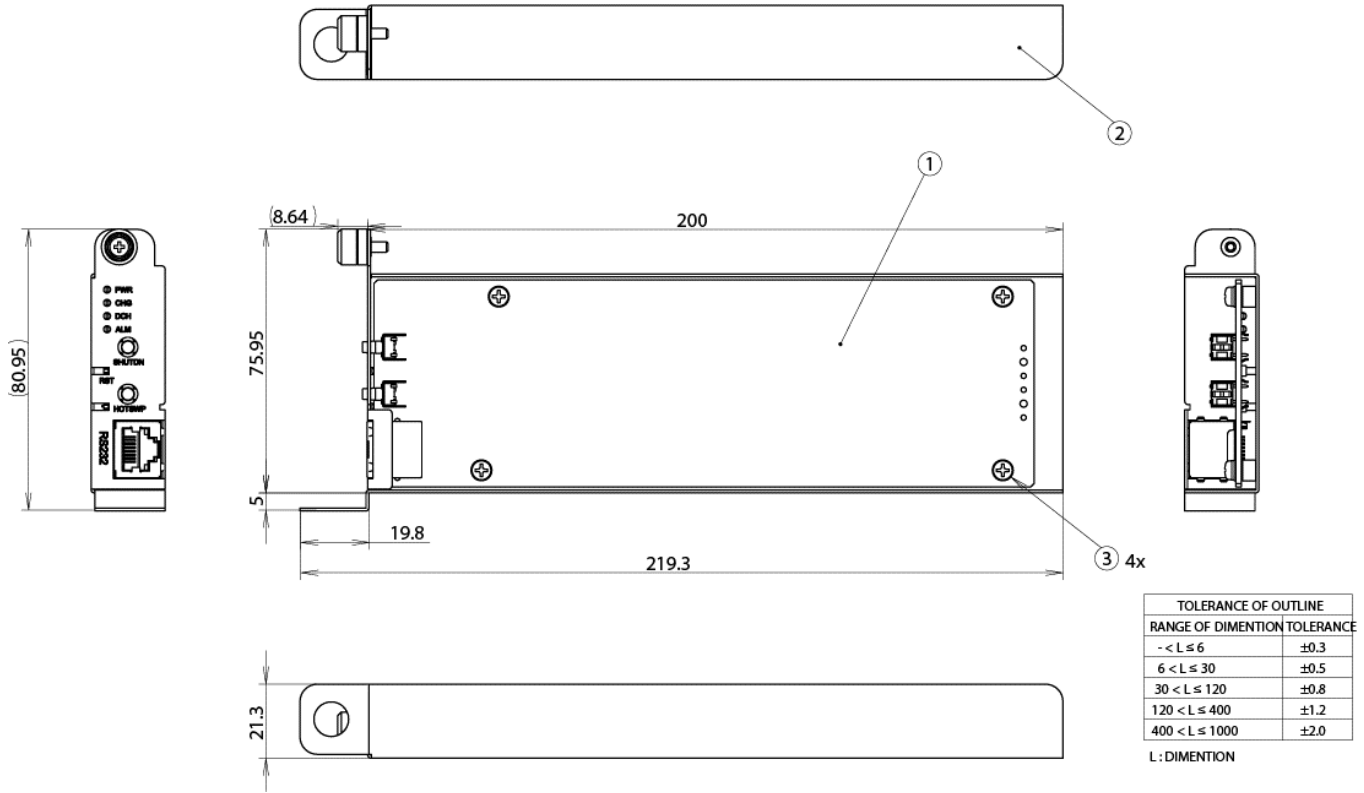
BUTTON DESCRIPTION

Button	Label	Function	Description
Button 1	SHUTDN	Shutdown	Push and hold for 5 seconds to turn battery power off
Button 2	HOTSWP	Hot Swap	Reserved for future use
Button 3	RST	Reset	Push to reset BCU
Button 4	-	Power Up	

RJ45 Connector Pin Assignment

Amphenol	Pin	Signal	Description
	1	-	-
	2	-	-
	3	TXD	Sending data
	4	GND	-
	5	GND	-
	6	RXD	Receiving data
	7	-	-
	8	-	-

MECHANICAL OUTLINE



RELATED PRODUCTS

Order Number	Description	Link to Datasheet
MWBBU118-4000-A	BBU (Battery Backup unit)	https://power.murata.com/datasheet/?data/power/mwbbu118-4000-a.pdf
MWBBES-212	BBU Shelf	https://power.murata.com/datasheet/?data/power/mwbbes-212.pdf
MWOC-RMU	Monitor and Control Unit	https://power.murata.com/datasheet/?data/power/mwoc-rmu.pdf

Murata Power Solutions, Inc.
129 Flanders Rd. Westborough,
Ma 01581, USA.
ISO 9001 REGISTERED



This product is subject to the following operating requirements and the Life and Safety Critical Application

Sales Policy: Refer to: <https://www.murata-ps.com/requirements/>

Murata Power Solutions, Inc. makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Specifications are subject to change without notice.

©2021 Murata Power Solutions, Inc.