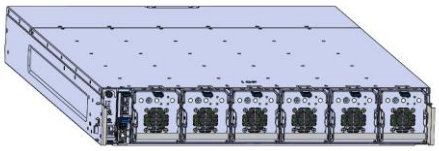
Murata Power Solutions

Preliminary MWBBES-212-B-1

OCP compliant rack mountable battery backup Shelf



PRODUCT OVERVIEW

Murata offers 21" OCP rack mountable battery backup solutions that support high reliability architectures. MWBBES-212-B-1 provides a delivery system for up QTY six (6) 3kW Battery Backup Units (BBU), a Remote Management Unit (RMU), a Battery Control Unit (BCU) and an Auxiliary boad (AUX) for deployment in OCP systems and other distributed architecture applications requiring a highly reliable, scalable energy storage solutions. The BBU adapts advanced battery technology resulting in much lower weight compared with traditional lead acid battery solutions, reducing the total cost of ownership.

ORDERING GUIDE

Part Number	Discharge power	Charge/Discharge Voltage
MWBBES-212-B-1	18,000W	50.5-51/47.5-48Vdc

FEATURES

- 537 (W) x 791.8(L) x 92.3(H) mm
- ORV3 standard rack compliant
- Houses up to six (6) battery backup units (BBU) and one (1) remote Management Unit (RMU) and one (1) battery control unit (BCU) and one (1) Auxiliary boad (AUX)
- 240sec hold-up time, up to 18kW
- Up to two battery shelves can be connected in parallel for additional battery backup time
- DC Output Busbar Configuration available for bar clip connection
- Communicates with Murata MWOC-211-P-C Power Shelf
- 2OU height
- 2-years warranty

Planned Submissions

CHARGE/DISCHARGE CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
Charge Voltage			50.5-51		Vdc
Charge Power	With six BBU	0		1500	W
	With five BBU	0		1250	W
	With four BBU	0		1000	W
	With three BBU	0		750	W
	With two BBU	0		500	W
	With one BBU	0		250	W
Charge Current	With six BBU	0		30	A
	With five BBU	0		25	A
	With four BBU	0		20	A
	With three BBU	0		15	A
	With two BBU	0		10	A
	With one BBU	0		5	A
Discharge Voltage			47.5-48		Vdc
Discharge Power	With six BBU			18000	W
	With five BBU			15000	W
	With four BBU			12000	W
	With three BBU			9000	W
	With two BBU			6000	W
	With one BBU			3000	W
Discharge Current	With six BBU			360	A
	With five BBU			300	A
	With four BBU			240	A
	With three BBU			180	A
	With two BBU			120	A
	With one BBU			60	A

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

ENVIRONMENTAL CHARACTERISTICS

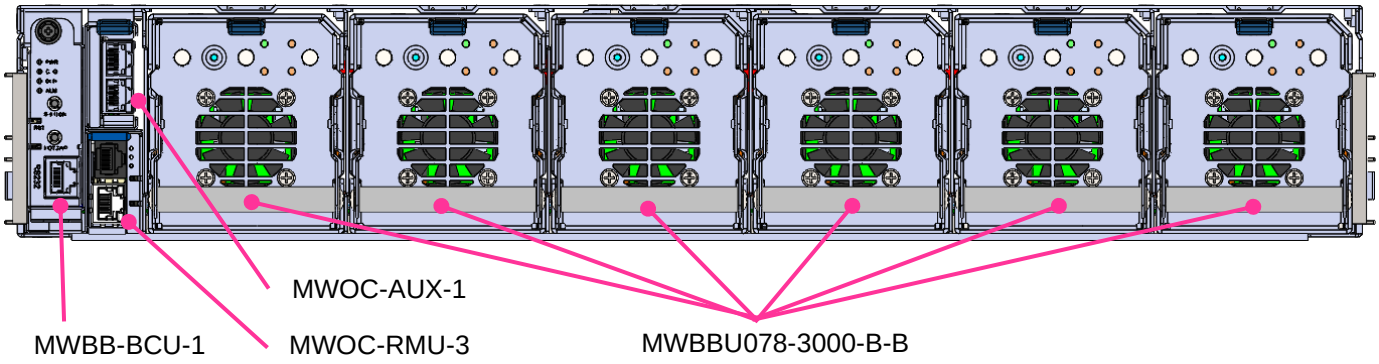
Parameter	Conditions	Min.	Typ.	Max.	Units
Temperature	Storage, without BBU	-40		70	°C
	Operating	0		40	°C
Humidity	Storage, non-condensing	5		93	%
	Operating, non-condensing	10		90	%
Shock	Non-operating：12G / Operating：6G				
Vibration	Non-operating：Sinusoidal vibration, 5-500Hz 1G Operating ：Sinusoidal vibration, 5-500Hz 0.5G				
Safety approval	UL 62368-1 IEC 62368-1				
Weight	Without BBUs, BCU		18.9		Kg

EMISSION AND IMMUNITY

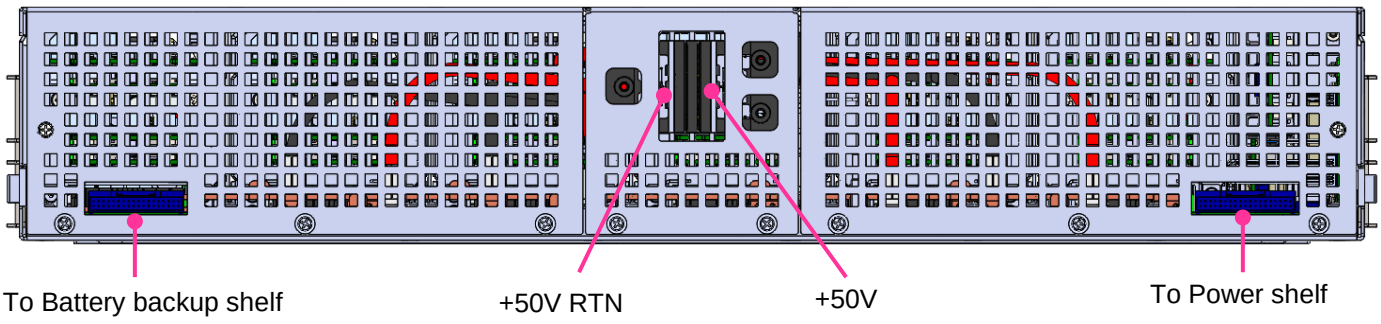
Parameter	Standard	Criteria
ESD immunity	IEC/EN 61000-4-2	11.2kV(air),5.6kV(Contact) criteria A

PRODUCT VIEWS AND CONNECTOR DETAILS

Front View



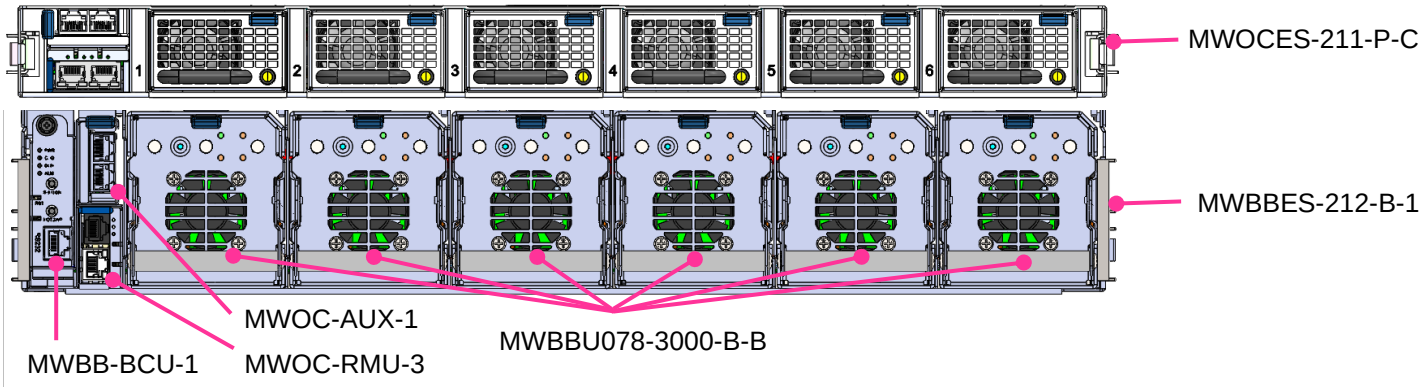
Rear View



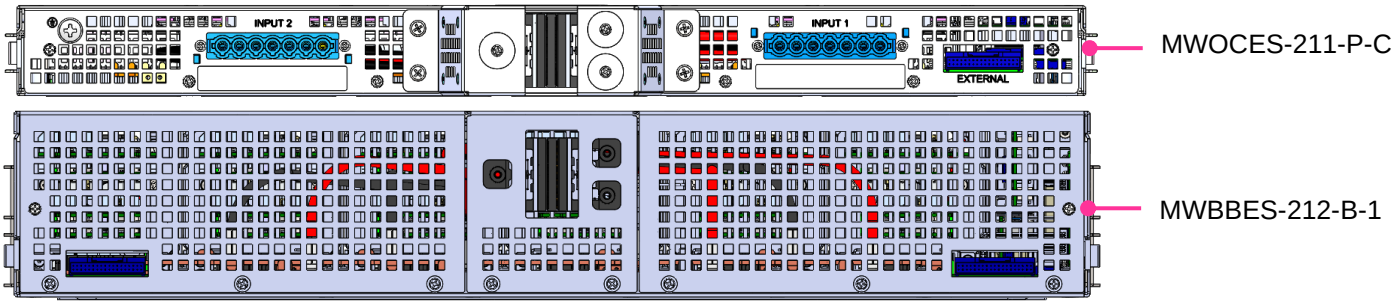
CONNECTOR CONFIGURAITON WITH POWER SHELF

Example of 50V power supply system (MWOCES-211-P-C)

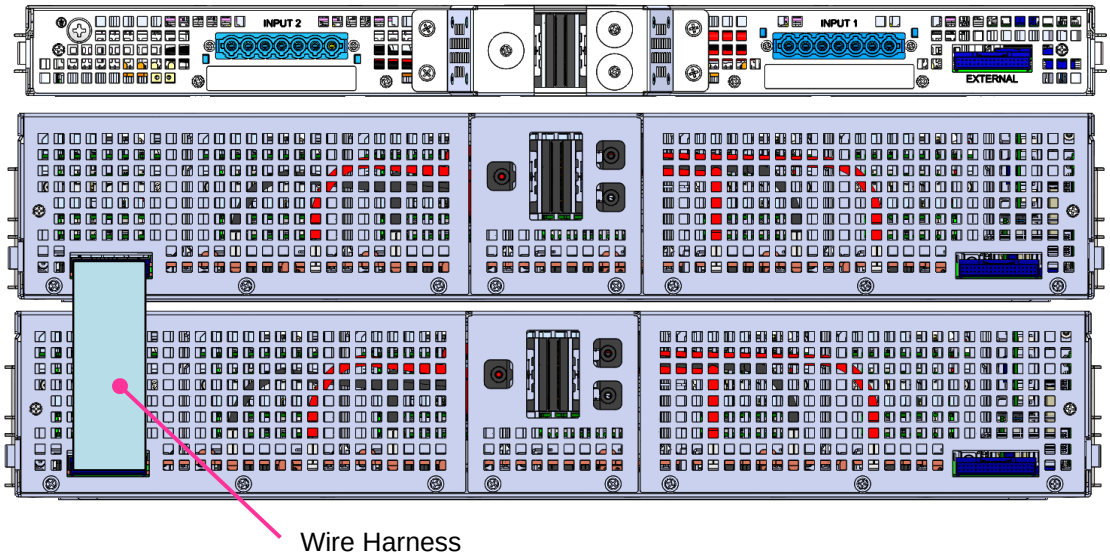
FRONT VIEW



REAR VIEW

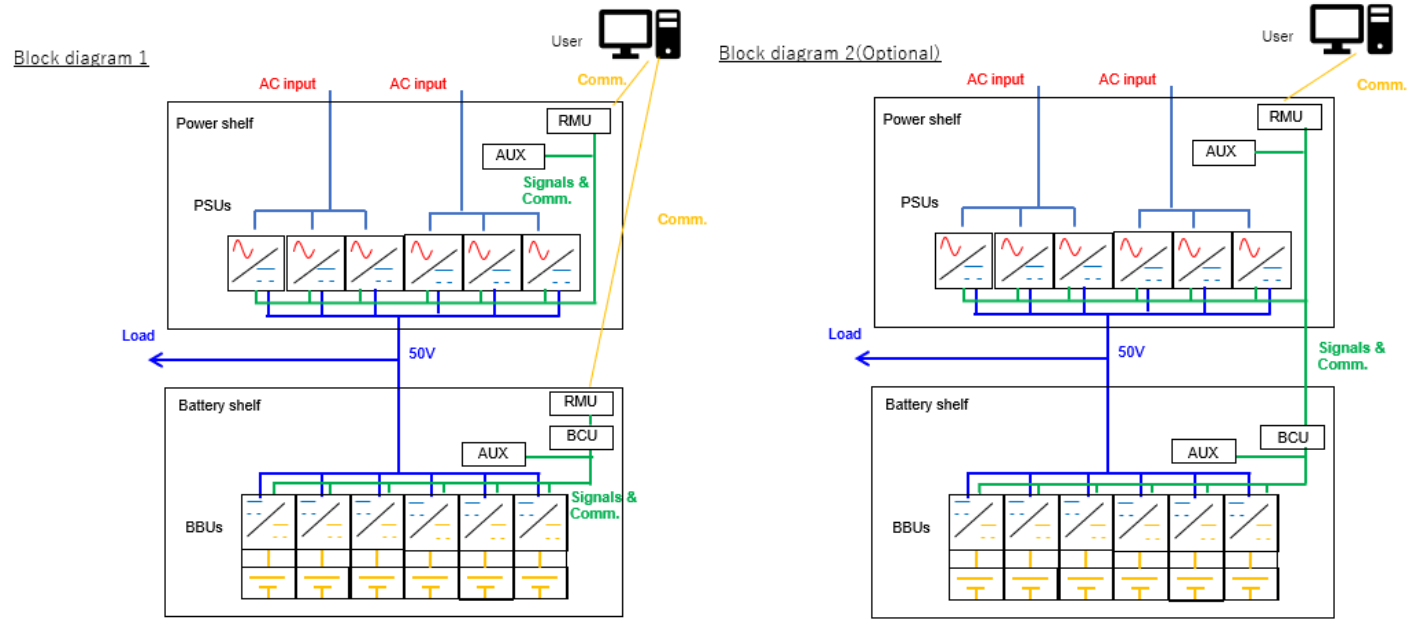


REAR VIEW (when connecting the additional BBU shelf)



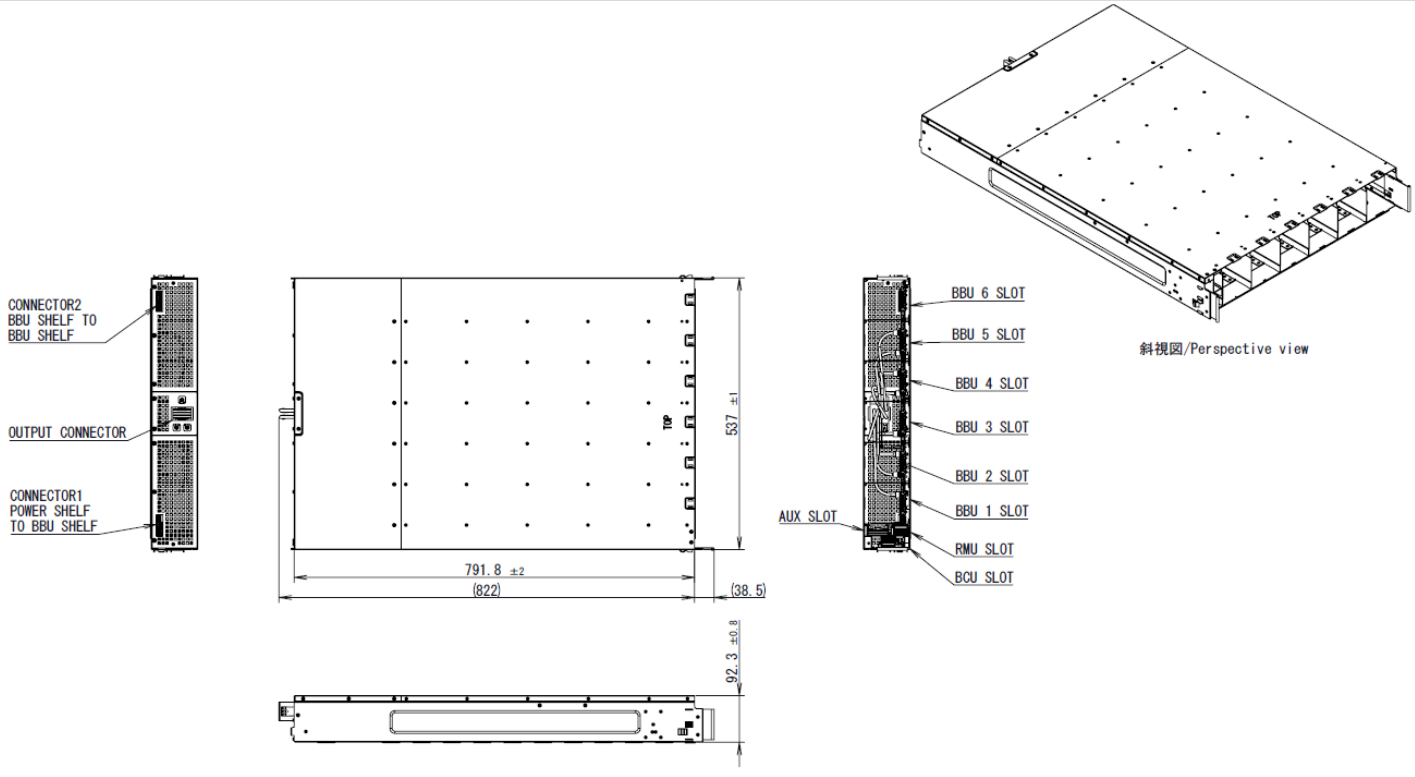
⚠ Connect both BBU shelves with the Wire Harness and insert blank panels into the second BBU shelf without a BCU and a RMU.

EXAMPLE DEPLOYMENT BLOCK DIAGRAM



Block diagram 1 : Our BBU shelf can be connected to any other power shelf compliant with ORV3 without signal cable.
Block diagram 2(optional) :
In case of connected between Power shelf and BBU shelf with signal cable, no RMU is needed on BBU shelf.

MECHANICAL OUTLINE:



SAFETY CONSIDERATIONS:

Junction between shelf and rack busbar may be very hot, in the case of a heavy loads. Please be aware and take adequate precautions.

RELATED PRODUCT DATASHEETS

Order Number	Description	Click link below to open online datasheet
MWOC-RMU	Monitor and control unit	Link to: Datasheet
MWBB-BCU	BCU (Battery Control Unit)	Link to: Datasheet
MWOCES-211-P-C	21” 1OU, OCP compliant power shelf	Link to: Datasheet

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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.com/requirements/

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