



PRODUCT OVERVIEW

Murata offers 21" OCF rack mountable battery backup solutions that support high reliability architectures. MWBBES-212-A provides a delivery system for up QTY four (4) 4kW [Battery Backup Units](#) (BBU) and a [Battery Control Unit](#) (BCU) for deployment in OCF 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-A	16,000W	12.3Vdc

FEATURES

- 543(W) x 600(L) x 87(H) mm
- Fits in OCF 21" open rack standard
- Houses up to four (4) battery backup units (BBU) and one (1) battery control unit (BCU)
- 120sec hold-up time, up to 16kW
- Up to three battery shelves can be connected in parallel for additional battery backup time
- Output Busbar link kit available for multi-shelf connection
- Communicates with Murata MWOC/MWDC series Power Shelves
- Hot swappable
- 2U height

Planned
Submissions



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

CHARGE/DISCHARGE CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
Charge Voltage			12.3		Vdc
Charge Power	With four BBU	0		3,739	W
	With three BBU	0		2,804	W
	With two BBU	0		1,870	W
	With one BBU	0		935	W
Charge Current	With four BBU	0		304	A
	With three BBU	0		228	A
	With two BBU	0		152	A
	With one BBU	0		76	A
Discharge Voltage			12.3		Vdc
Discharge Power	With four BBU			16000	W
	With three BBU			12000	W
	With two BBU			8000	W
	With one BBU			4000	W
Discharge Current	With four BBU			1300	A
	With three BBU			975	A
	With two BBU			650	A
	With one BBU			325	A

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	12G non-operating				
Vibration	Sine vibration: 5-500Hz, 1G				
Safety approval	UL 60950-1, UL 62368-1 IEC 60950-1, IEC 62368-1				
Weight	Without BBUs, BCU		16		Kg

ISOLATION CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
Isolation Test Voltage	SELV to chassis	500			Vdc

EMISSION AND IMMUNITY

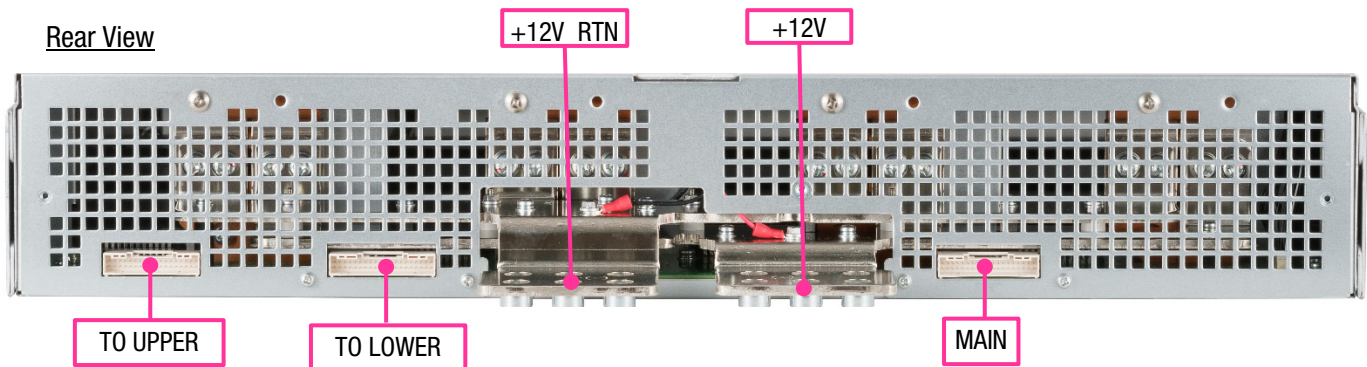
Parameter	Standard	Criteria
ESD immunity	IEC/EN 61000-4-2	Level 4 criteria A

PRODUCT VIEWS AND CONNECTOR DETAILS

Front View



Rear View



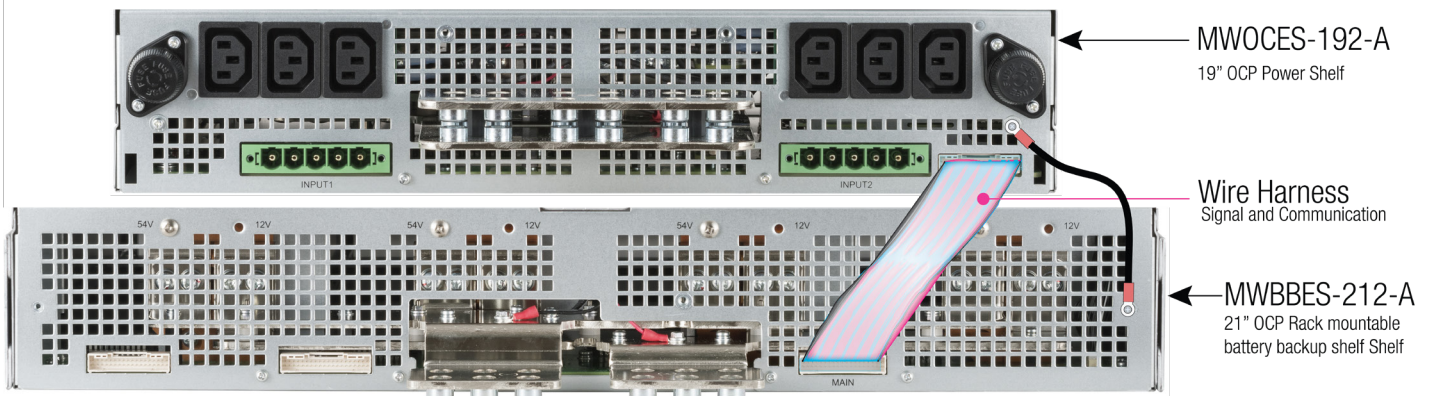
CONNECTOR CONFIGURATION WITH POWER SHELF

Example of 12V power supply system (MWOCES-192)

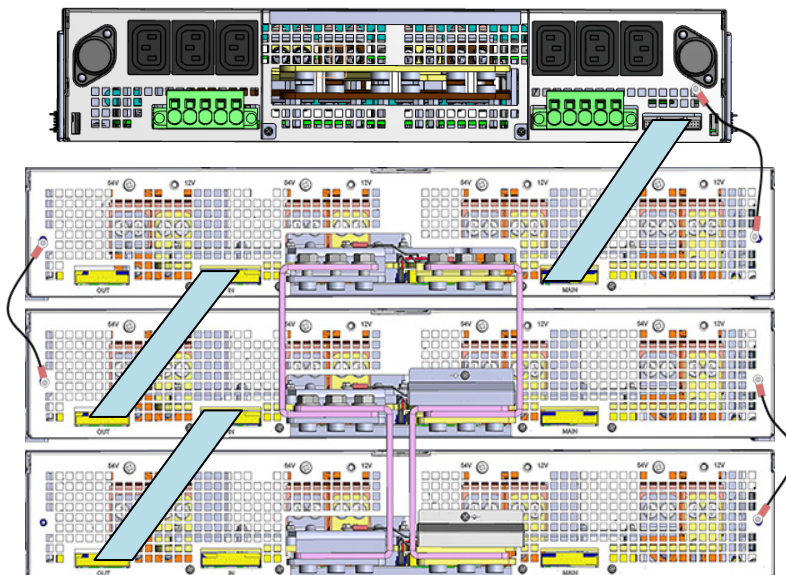
FRONT VIEW



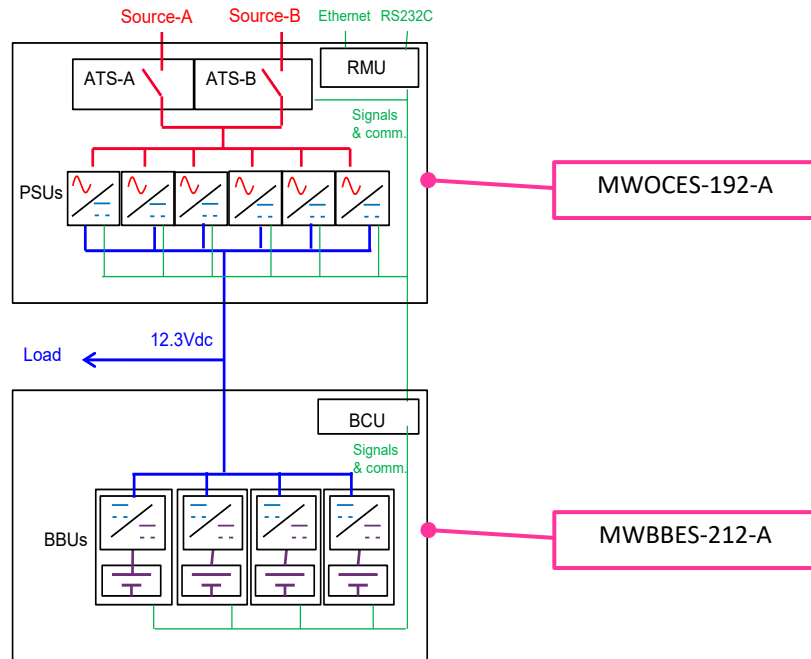
REAR VIEW



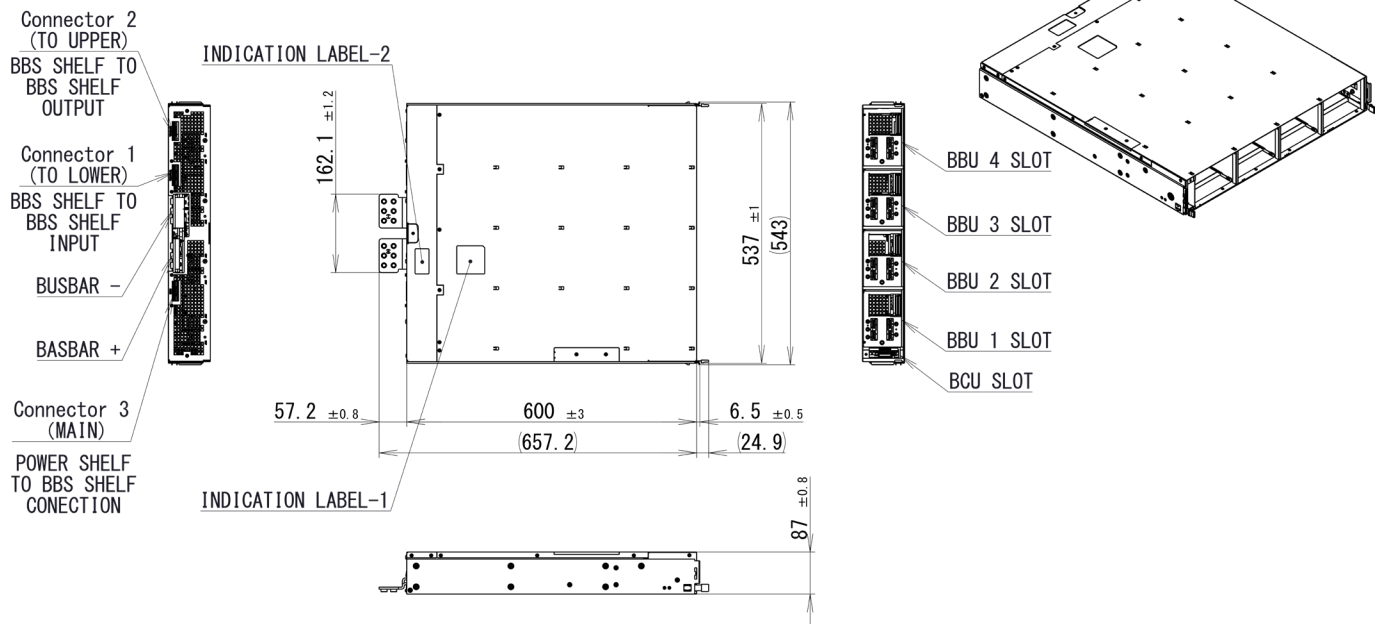
Wire Harness and Busbar Connected



EXAMPLE DEPLOYMENT BLOCK DIAGRAM



MECHANICAL OUTLINE:



SAFETY CONSIDERATIONS:



Junction between shelf and rack busbar may be extremely hot, in the case of a heavy load and especially when shelf is mounted in V2 Open Rack (Single Busbar). Please be aware and take adequate precautions.

RELATED PRODUCT DATASHEETS

Order Number	Description	Link to Datasheet
MWBBU118-4000-A	BBU (Battery Backup unit)	https://power.murata.com/datasheet?/data/power/mwbbu118-4000-a.pdf
MWBB-BCU	BCU (Battery Control Unit)	https://power.murata.com/datasheet?/data/power/mwbb-bcu.pdf
MWOCES-192	19" 2U, OCP compliant power shelf	https://power.murata.com/datasheet?/data/power/mwoces-192.pdf
MWOCES-211	21" 10U, OCP compliant power shelf	https://power.murata.com/datasheet?/data/power/mwoces-211.pdf
MWBB-KIT-2	Installation kit	-
MWBB-KIT-3	Busbar link kit	-
MWBB-KIT-5	Installation kit	-
MWBB-KIT-8	Installation kit	-

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ISO 9001 REGISTERED



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