

## FEATURES

- 3,000W discharge power
- 47.5-48.0V discharge voltage
- 50.5-51.0V charge voltage
- 240 seconds hold up time at 3kW
- 2U height
- 78.1(W)x 87.6(H)x 678.5(L)mm
- OCP System support
- Adjustable charging power
- Active current sharing
- ORing FET isolation
- Hot-swappable
- OVP, OCP, OTP and reporting
- 2-year warranty



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Planned  
Submissions



## PRODUCT OVERVIEW

MWBBU078-3000-B-B is a ORV3 based, 2U height, 48V output 3,000W battery backup unit (BBU) intended for deployment with Murata BBU shelf (MWBBES-212-B-1). Each BBU is capable of providing 3,000W of backup power for up to four minutes enhancing system reliability by providing a light- weight, high energy density backup solution for applications requiring distribution of 50Vdc power.

## ORDERING GUIDE

Part Number	Discharge power	Charge Voltage	Discharge Voltage	Remark
MWBBU078-3000-B-B	3,000W	50.5-51.0V	47.5-48.0V	Internal cooling fan

## CHARGE/DISCHARGE CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.	Units
Charge Voltage		48	50.5-51.0	54.5	V
Charge Current		0		5.2	A
Charge Power		0		249	W
Discharge Voltage			47.5-48.0		V
Discharge Power		0		3000	W
Discharge Current		0		63.2	A
Hold up time	@100% Load ,after 4 years ,35°C		240		Sec

① Dependent upon load power and deterioration over time

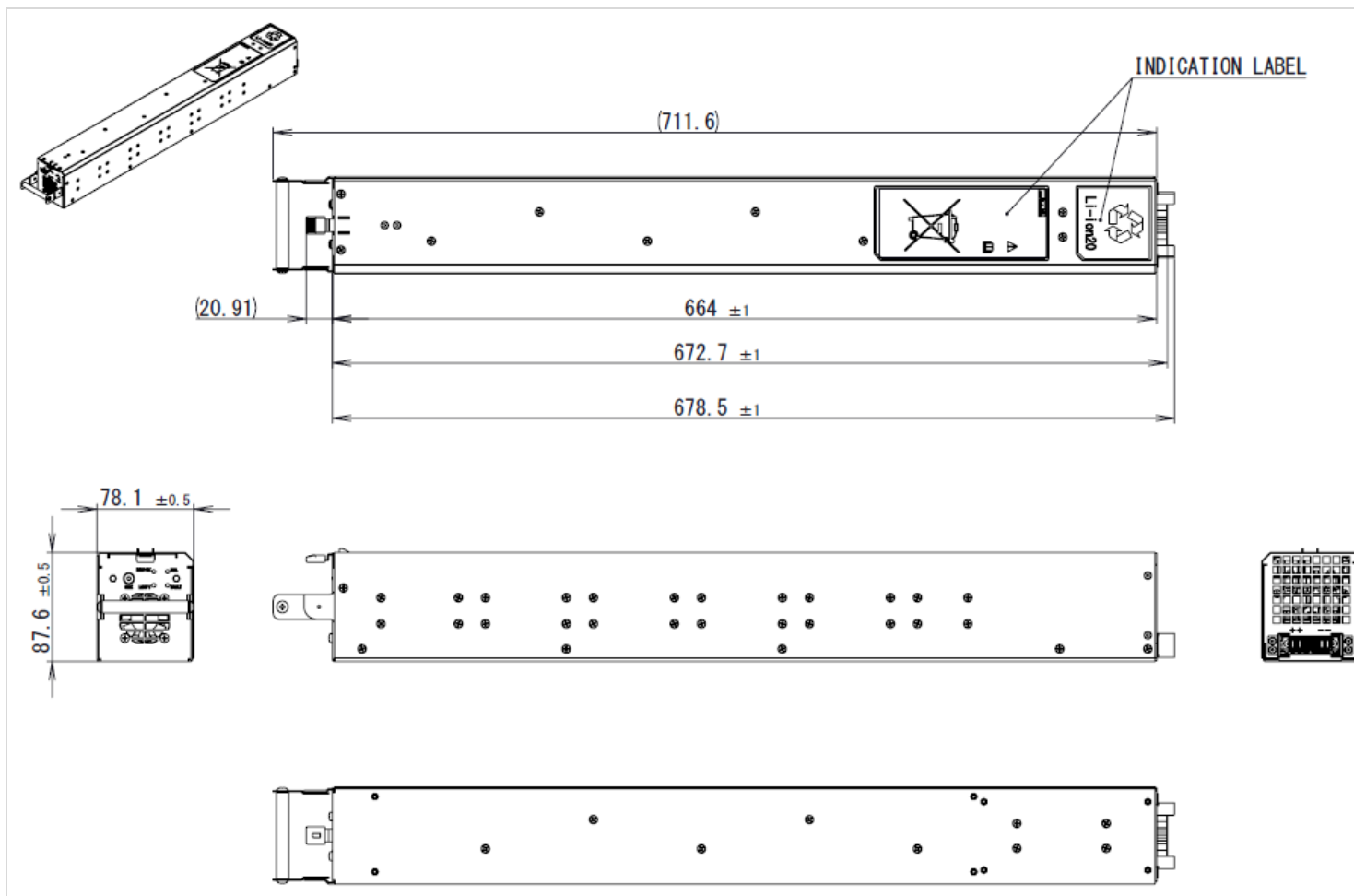
## ENVIRONMENTAL CHARACTERISTICS

ENVIRONMENTAL CHARACTERISTICS						
Parameter	Conditions		Min.	Typ.	Max.	Units
Temperature	Storage		-20		60	°C
	Operating		0		40	°C
Storage Time	-20 to 30°C ; 30% maximum initial state of charge (SOC); 30%; Internal UV protection will not activate during this period		12			Month
Humidity	Storage, non-condensing		5		93	%
	Operating, non-condensing		10		90	%
Non-operating altitude					12000	m
Operating altitude					3000	m
Shock	Operation	6g, half-sine 11mS, 5 shocks per each of the three axes				
	Non Operation	12g, half-sine 11mS, 10 shocks per each of the three axes				
Vibration	Operation	0.5g acceleration, 1.5mm amplitude, 5 to 500 Hz, 10 sweeps at 1 octave/minute per each of the three axes (one sweep is 5 to 500 to 5 Hz)				
	Non Operation	1g acceleration, 3mm amplitude				
Safety approval	UL/IEC60730-1, UL1973, IEC62133-2, IEC62619, UL9540A					
Transportation Test	UN38.3					
Weight				7.6		Kg

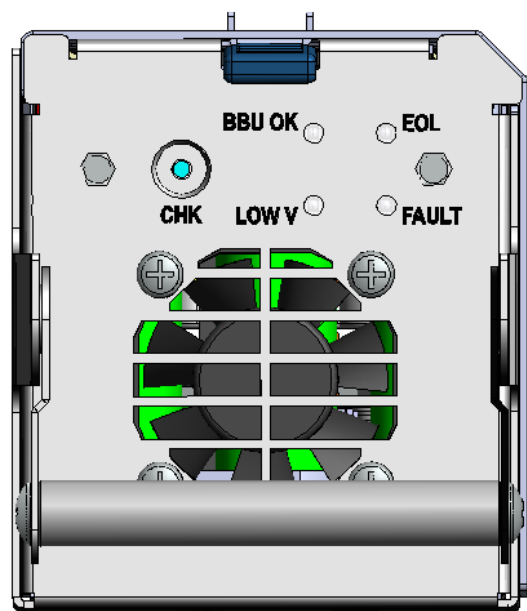
## EMISSION AND IMMUNITY

Item name	Standard	Criteria
Radiated emission	FCC/ICES-003 CISPR 32/EN55032	Class A
Radiated immunity	IEC/EN 61000-4-3	>3V/m Criteria A
ESD immunity	IEC/EN 61000-4-2 Electrostatic Discharge Immunity	Contact discharge>5.6kV Air discharge >11.2kV Criteria A
Power frequency magnetic field immunity	IEC/EN 61000-4-8	>1A/m Criteria A
MTBF	Telcordia SR-332 Issue 4 M1C3 @40 deg C (excluding battery)	>500k Hrs.

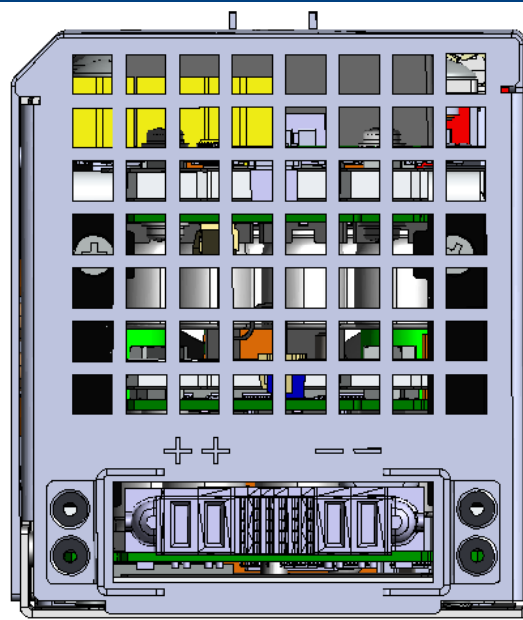
## MECHANICAL DRAWING



#### PRODUCT VIEWS AND CONNECTOR DETAILS



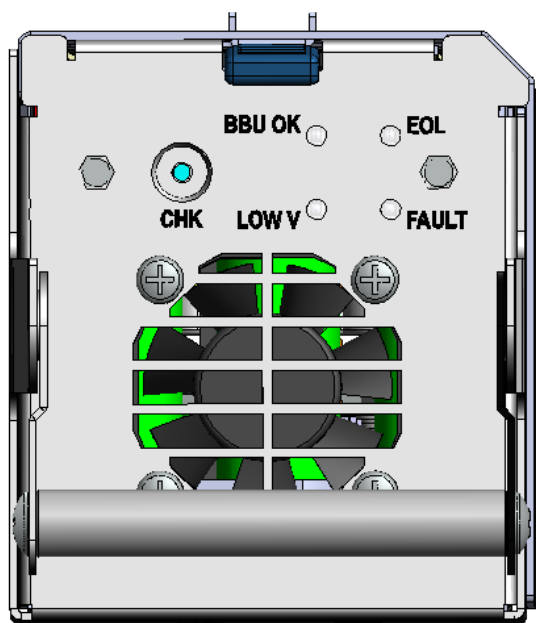
Front view



Rear view

## STATUS INDICATION AND CONTROL SIGNAL

Front View, BBU



STATE	BBU OK	LOW V	EOL	FAULT
Default	off	off	off	off
BBU ready (standby or discharging)	Light Green	off	off	off
FW update	Blinking Green *1	off	off	off
BBU charging	Blinking Green *2	off	off	off
BBU discharging	off	Blinking Amber *1	off	off
BBU low capacity (SOC<30%)	off	Light Amber	off	off
BBU EOL	off	off	Light Amber	off
Permanent fault (Replacement required)	off	off	off	Light Amber
Recoverable temporary fault	off	off	off	Blinking Amber *1

\*1 Blinking rate:@0.5s on/0.5s off

\*2 Blinking rate:@1.0s on/1.0s off

## RELATED PRODUCT DATASHEETS

Document Number	Description	Click link below to open online datasheet
MWBBES-212-B-1	21" BBU Shelf	Link to: <a href="#">Datasheet</a>
MWBB-BCU-1	BCU (Battery Control Unit)	Link to: <a href="#">Datasheet</a>

## SAFETY CONSIDERATIONS



MWBBU078-3000-B-B is designed for deployment only within the Murata MWBBES-212-B-1, refer to respective datasheet for additional details.

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ISO 9001 REGISTERED



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