DATASHEET Li-ion 10S 36V 41.6Ah MU2 MegaUMPF®2 Battery



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1. Introduction

The BatteryLabs MegaUMPF2 platform is designed for multipurpose use within li-ion 7S-13S (24V-48V) and LiFePO4 4S (12V) battery setups. The durable design, consisting of fiber reinforced plastics, makes this battery suitable for operating in harsh environments. This type of battery is suited with a digital indicator and features BLE functionality to read out a broad variety of data.

Main markets; electric mobility, boating, industry, mobile energy supply.

2. Product specifications

Item	Value	Remark
Product category	Lithium batteries	
Product name	Battery Li-ion 10S 36V 41.6Ah MU2	
SKU	32031	
Weight	10.33 kg	
EAN number	8719992322053	
Dimensions with bumpers	189 x 159 x 293 mm	(LxWxH)
Dimensions without bumpers	182.8 x 152.8 x 288.5 mm	(LxWxH)
Voltage nominal	36.0 V	
Capacity	41.6Ah	@ 0.2C 20°C
Current continuous	40A	
Current peak	80A	3 sec
Charge current	12A	Via battery terminals

3. Cell specifications

Item	Value	Remark
Cell brand	BatteryLabs OEM	
Cell type	BL18650P2-2600	
Nominal voltage cell	3.60 V	
Cell capacity	2,600 mAh	@0.05C
CID	yes	
Max Current	3C	
Cells in series	10	
Cells parallel	16	

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4. BMS specifications

Item	Value	Remark
BMS brand	Best Way Electronics	
Cell auto balance	Yes, 72±10mA	
Short circuit protection	Yes	
Temperature protection	Yes, 2 pcs bi-metal sensors	
Overcharge protection	Yes, 4.28±0.025V	
Over discharge protection	Yes, 3.00±0.05V	
Over current protection	Yes, 120A±20A	

5. Control PCB

Item	Value	Remark
Brand	BatteryLabs	
Available types	BSI (BatteryLabs standard)	

6. BLE data

Item	Value	Remark
Current status	Battery status	Ready, Disengaged,
	State of charge	Charging, Discharging,
	Voltage	Preheating, Error
	Current	
	Outside (ref) temperature	
	Battery temperarure	
Battery healthcare	Deep discharges	
	Subzero discharges	
	Min voltage	
	Max voltage	
	Max humidity level (water damage)	
	Max charge current	
	Max discharge current	
History	Cyle life	
	Used energy (Wh) over last 5 runs	

7. Enclosure

Item	Value	Remark
Material	PC/ABS/fiber reinforced/Rubber	

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8. Temperatures

Item	Value	Remark
Operating; charge	0 ∼45°C	
Operating; discharge	-20 ∼60°C	
Storage	-20 ∼60°C	

9. Safety

Item	Value	Remark
MSDS	Does apply	
UN 38.3	Does apply	
CE	Does apply	
IP	IP65-67 rated, non official	Depends on options
Temperature protection	Yes	1x digital + 2x analog