



FW 12-40

Electrical Characteristics

Nominal Voltage [V]	12.8
Nominal Capacity [Ah]	40
Energy [Wh]	512
Internal Resistance [mΩ]	≤20
Cycle Life	>2000 cycles at 0.2C 100% DoD
Months Self Discharge [%]	<3
Efficiency of Charge	100% at 0.5C
Efficiency of Discharge	96-99% at 1C

Charge

Charge Voltage [V]	14-14.6
Charge Mode	CC at 0.2C to 14.6V, then at CV 14.6V to charge current less than 0.02C
Charge Current [A]	9
Max. Charge Current [A]	20
Charge Cut-off Voltage [V]	15.6V ± 0.2

Discharge

Max. Continuous Current [A]	40
Max. Pulse Current [A]	80 (<3s)
Discharge Cut-off Voltage [V]	8

Environment

Charge Temperature [°C]	0°C to 45°C (32°F to 113°F) at 60 ±25% Relative Humidity
Discharge Temperature [°C]	-20°C to 60°C (-4°F to 14°F) at 60 ±25% Relative Humidity
Storage Temperature [°C]	0°C to 40°C (32°F to 104°F) at 60 ±25% Relative Humidity
Ingress Protection	IP56

Mechanical

Cell Material	LiFePO4
Plastic Case	ABS
Dimensions - H x W x D [mm]	168x197x165
Weight [kg]	5.75
Terminal	M6

BMS

Protection Function	Over charge protection, Over discharge protection, Over current protection, Short current protection, Balanced function, Temperature protection
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