TOWER PRO 51.2V 440Ah

ECOBATEnergy

PERFORMANCE SPECIFICATIONS

GENERAL INFORMATION

Nominal Voltage	51.2 Vdc
Nominal Capacity	440 Ah
Nominal Energy	22528 Wh
Battery Chemistry	3.2V LiFePO^4
Cell Connectivity	16S2P
Efficiency (Round Trip)	≥98%
Self-Discharge Rate	<3% Monthly
Max. In Parallel	16 Pcs
Max. In Series	Not Allowed
Cycle Life 0.2C,25°C @80% DoD	8000 Cycles
Origin	Shenzhen, China
BMS Build-in	Yes
Design Life	20 Years

Celule EVE Grade A 220Ah
16S2P

BMS JK
JK-PB2A16S20P V19

Protecție IP65

Modul Stingere incendiu
cu aerosol încorporat

8000 Cycles
0.2C,25°C@80% DoD

BUREAU VERITAS

Încălzire
încorporată

Bluetooth(App)
Yes

20 Years
Design Life



OPERATING PARAMETERS

Operating Voltage Range	44.8V-57.6V
Discharge Cut-Off Voltage	40V
Max. Discharge Current	200A
Peak Discharge Current	250A (3s)
Max. Charge Voltage	58.4V
Standard Charge	88A (0.2C)

ENVIROMENTAL SPECIFICATIONS

Discharge Temperature	-20°C ~ 55°C
Charge Temperature	0°C ~ 55°C
Storage Temperature	-10°C ~ 30°C
Ingress Rating	IP65

MECHANICAL SPECIFICATIONS

Dimensions (L*W*H)	680*700*263 mm
Weight	160 Kg
Mounting Options	Wall/Mobile
Indicator State	ALM/RUN/SoC

BMS PROTECTION CHARACTERISTICS

Primary Charging	Current: 205A	DelayTime:20s
Second Charging	Current: 210A	DelayTime:1s
Primary Discharging	Current: 205A	DelayTime:10s
Second Discharging	Current: 250A	DelayTime:1s
Over-Charge Voltage	Voltage: 58.4V	DelayTime:1~2s
Over-Discharge Voltage	Voltage: 40V	DelayTime:1~2s
Temperature	PCB Temperature ≥ 95°C	
	Recover ≤ 85°C	
Communication Port	RS485, Optional For CAN/Dry Contact	

OTHERS

Screen	No
Terminals	Magnetic Plug-In
Case Material	SPCC Steel
Air Breaker	Yes
Heating	Yes
Bluetooth(App)	Yes

CONSTANT CURRENT DISCHARGE DATA (AMPERES @ 25°C))

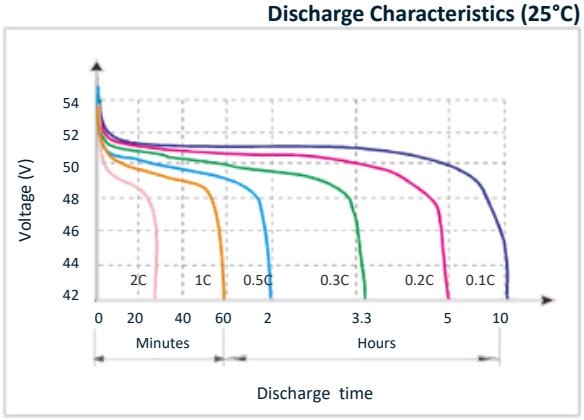
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	220A	146.6A	110A	88A	44A	22A

CONSTANT POWER DISCHARGE DATA (WATTS @ 25°C))

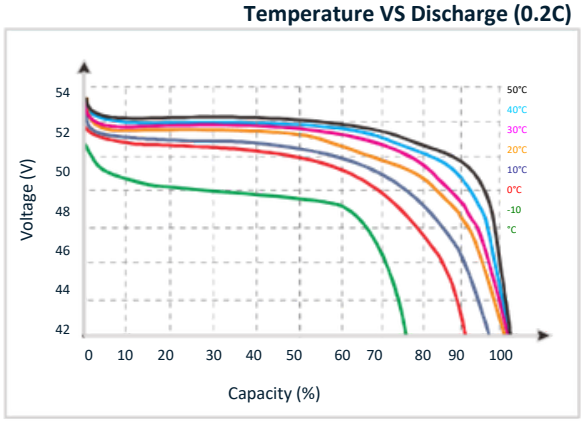
Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut-Off Voltage (40V)	---	11264W	7509.3 W	5632W	4505.6 W	2252.8 W	1126.4W

TESTING REPORT CURVE

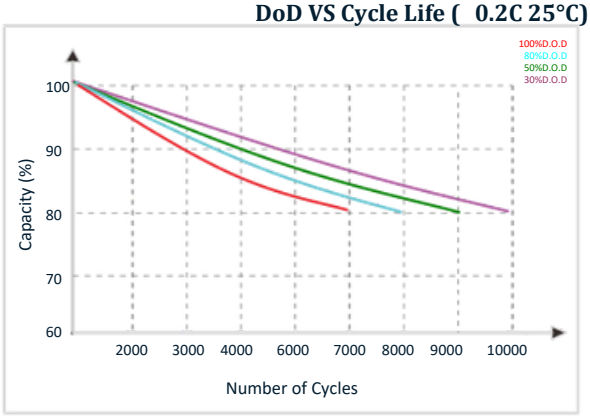
Discharge Characteristics (25°C)



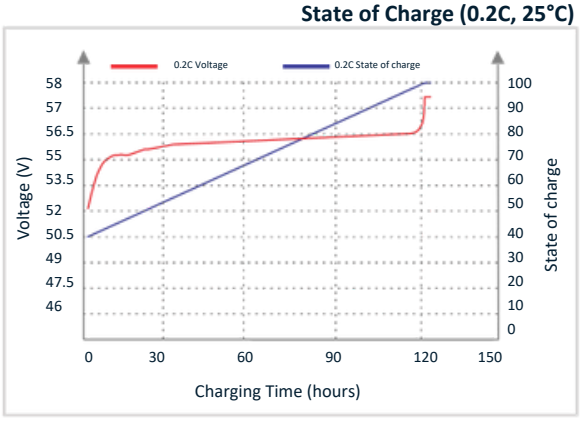
Temperature VS Discharge (0.2C)



DoD VS Cycle Life (0.2C 25°C)



State of Charge (0.2C, 25°C)



NOTES

Note 1. The recommended storage temperature is 20ºC to 30ºC, battery life would be reduced if stored at high temperature (The recharging interval should be 12 months under the condition of storage temperature < 30ºC, and 8 months under the condition of 30ºC < storage temperature < 40ºC).

Note 2. Affected by the external environment factors, such as temperature and duration of transportation and storage, the rated capacity may fluctuate by ±5%.