

WESTAR WS6LF20 (12.8V20Ah) LFP battery system

Product Features

- ⊗ High energy density, small size, light weight, no pollution;
- ⊗ 1C rate charge/discharge;
- ⊗ Match varied inverters;
- ⊗ IP20 grade, suitable for indoor;
- ⊗ 10 years design life, Stable performance, maintenance-free;



Double layered Safety Design
Much safer
More reliable.

Smart Management system

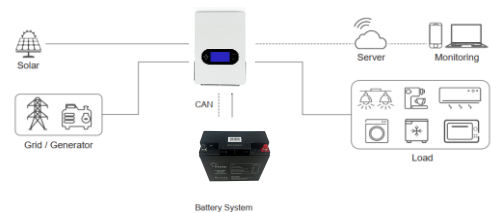
1C Charge/Discharge
Efficient charging and discharging.

Single Management
Ultimate security and ultra-simple O&M.

Multi-Function

Westar Energy lithium series batteries provide superior performance, capacities and reliability. Using state of high power cell technology, the lithium series is designed for environmentally sensitive areas that require super long cycle life capabilities.

Westar Energy lithium batteries are widely used in industrial, residential, commercial and private applications. The maintenance free construction and advanced design features makes the lithium series the definitive choice for a wide variety of markets. Like solar and renewable energy storage, electric vehicle, golf cart and industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and no-idle solution; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems



Factory/Office Park/Hotel/Restaurant
Arbitraging from the TOU tariff, peak-load shifting

Mobile charger
Used as a backup power for household use

Off-grid
Multi-energy Energy system with solar, diesel generator, wind turbine, etc.

Product Parameters

Model	Westar Energy -12.8V20Ah
Battery Parameters	
Battery cell model	LiFePO ₄ - 20Ah, Cylindrical
Battery capacity	256Wh
Dimensions(LxWxH)	175*75*165mm
Weight	2.1
Terminal Type	M5/Plug
Terminal Torque	8.5N*M
Case Material	ABS
BMS build-in	Yes
Efficiency – round trip	> 99.5
Self Discharge per Month	< 1.5%
Max parallel connectors	4
Series connections	4
Cycle life (1C, 25°C@100% DOD)	> 4000
Discharge Temperature	-23~65°C
Charge Temperature	-3~65°C
Storage Temperature	-20~45°C
Bluetooth(App)	NO
LCD Screen	NO
Heating function	NO
Voltage Window	11.2~14V
Recommend Charge Voltage	14.2V
Max Charge Voltage	14.6V
Recommend Charge current	10A
Max continuous charge current	20A
Recommend Discharge voltage	11.2V
Max Discharging Voltage	10.8V
Max Continuous Discharge current	20A
Peak Discharge Current	40A(3S)
Communication	NO

* The system will be derated when the ambient temperature exceeds 45°C.

** The system will be derated when the altitude is between 2000 and 3000m.

Certifications

System: CE(IEC61000,IEC62619,IEC62477),UN3480, UKCA ;

Pack: UN38.3;

Note: Product specifications are subject to change without any prior notice as per regular modifications made by company.

Performance

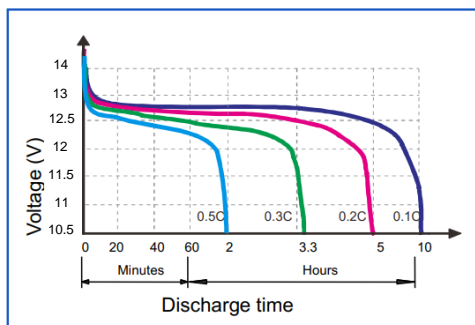
Constant Current Discharge Data (Amperes @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (10.8V)	20A	1A	6.7A	5A	4A	2A	1A

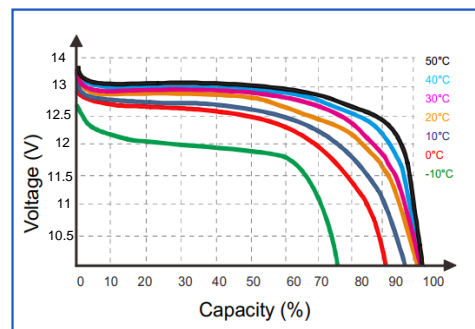
Constant Watts Discharge Data (Amperes @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (10.8V)	256W	128W	85.4W	64W	51.2W	25.6W	12.8W

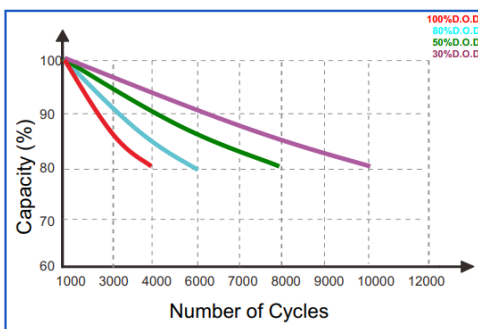
Discharge characteristics (25°C)



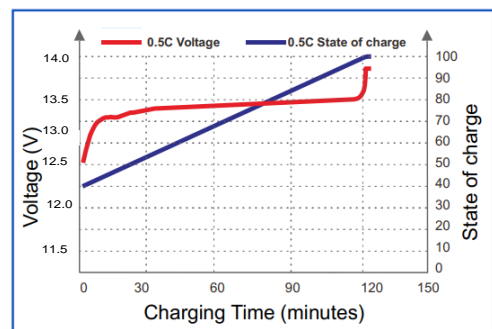
Different temperature Discharge curve (0.5C)



Discharge DOD discharge cycle life curve (0.2C, 25°C)



State of charge curve (0.5C, 25°C)



Note 1: Please always refer to the latest edition of our technical manual that published on our website to ensure safe and efficient operation.

Note 2: When make parallel connection, please full discharge batteries, then recharge after parallel connected; when series connect, please keep batteries with same remain capacity.