DATOU BOSS

Version: 1.1.1

LiFePO4

51.2V 100AH LIFEPO4 BATTERY 3U MANUAL

Operation and Maintenance

(DT-3U-48100)

SUPPORT

If you are experiencing technical problems and cannot find a solution in this manual,please contact DATOU BOSS for further assistance.

- Email: Manager@xdatou.com
- The website:www.xdatou.com
- Phone/Wechat/Whatsapp/LINE:+8613783531376

Description

This manual describes in detail the requirements and procedures for safe installation and operation of DATOU BOSS lithium battery pack. Please read this manual carefully. Only qualified persons are allowed to install, operate and maintain the system, otherwise it may cause product damage or personal safety risks.

Any actions against safety operation, or do not follow rules of this manual and limited warranty letter, will void warranty and qualification of this product. Meanwhile, the manufacturer will be not responsible for the product damage, property damage, personal injury or even death.

The information contained in this manual is accurate when it' s issued. DATOU BOSS reserves right to change specification (such as optimization, upgrade or other operations) without prior notice, and please always view the latest document via QR code on the label.

In addition, please noted that the diagrams/schematics in this document are used to help understand system configuration and installation instructions, which may be different from the actual items in the installation.

Contents

I.Information

1.1 Validity

This document is valid for: DT-3U-48V 100A-A

1.2 Target Group

This document is intended for qualified persons and operators. Only qualified persons are allowed to perform activities marked with a warning symbol and the caption "Qualified person" in this document. Qualified persons must have the following skills:

* Knowledge of how lithium iron phosphate batteries work and are operated.

* Knowledge of how an energy storage system (including PV/battery/hybrid inverter, MPPT, Meter,Distribution box etc.) works and is operated.

* Knowledge of local applicable connection requirements, standards, and directives.

* Training in the installation and commissioning of electrical devices and batteries.

* Training in how to deal with the dangers and risks associated with installing, repairing and using electrical devices and batteries.

1.3 Levels of warning messages

The following levels of warning messages may occur when handling the product.

DANGER
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION
Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury or product permanent damage.

NOTICE
Indicates a situation which, if not avoided, can result in property damage or product not working or accelerated product damage.

1.4 Symbol Description

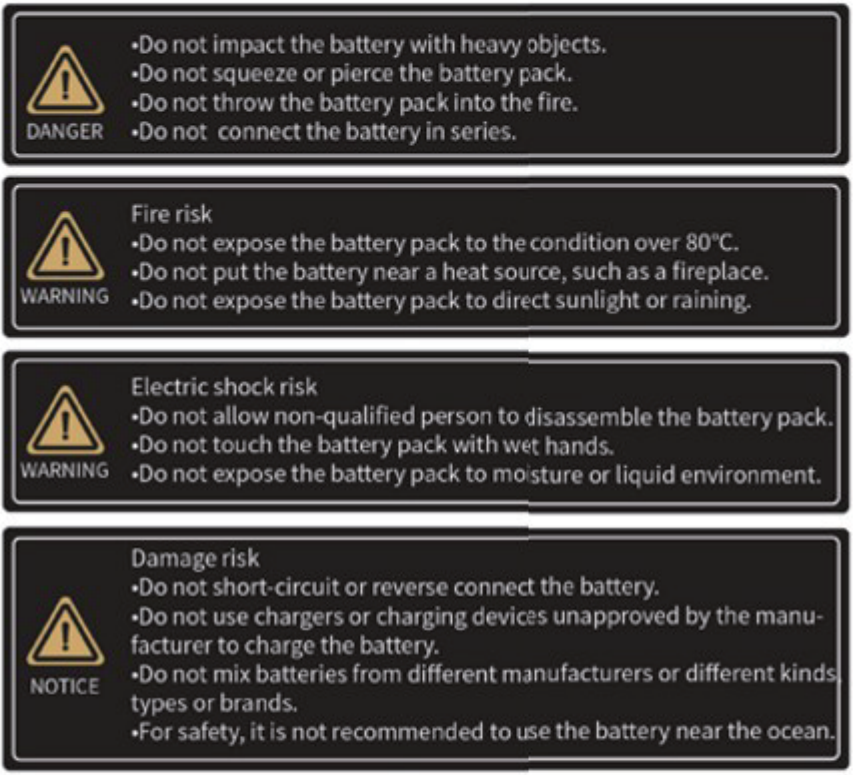
Symbols	Definition
	Indicates the danger of electric shock. If not avoided, it would cause casualities.
	Indicates a potentially dangerous condition which could result in injury or death.
	Indicates important information or warnings related to concepts talked about in the text.
	Indicates more information is available in other documents relating to the subject and reader.
	Indicates important steps or tips for optimal performance.
	Do not place the battery within children/pet touchable area.
	Do not place the battery near heat source and flammable material.
	Do not expose the battery to direct sunlight, rain and snow.
	Do not short circuit the battery.
	Recycle label
	WEEE designation
Label	**Definition**
Qualified person	Indicates activities that can only be performed by qualified persons
	Grounding point

1.5 Abbreviation Description

Abbreviation	Definition
Battery/battery pack/battery module	Single DT-3U-48V 100A-A rechargeable lithium iron phosphate battery pack including cells, BMS and enclosure etc.
Battery system/ cluster	Multiple DT-3U-48V 100A-A battery pack connected in parallel with power, communication and grounding cables and installation auxiliaries.
BMS	Battery management system Electronical Unit to ensure lithium cells' safety and display information or control the operation of the battery.
SOC	State of charge The battery state of charge refers to the percentage of the remaining capacity and rated capacity of the battery.
SOH	State of health The battery health status refers to the percentage between the full charged capacity and the rated capacity of the battery.
DIP switch	Used to set the address of the battery in the battery pack

II.Safety

2.1 Safety precautions



2.2 Safety instructions

The battery has been designed and tested in accordance with international (such as UL, IEC, UN38.3 etc.) safety requirements. However, due to various factors during the whole lifetime process, **DATOU BOSS** cannot guarantee absolute safety, in order to prevent personal and property damage and ensure long-term operation of the battery. Please do read and follow the section below carefully to operate the battery and handle emergency situations.

2.2.1 Safety gear

It is required to wear the following safety gear when installing and handling the battery pack.


Insulated gloves


Safety Glasses


Safety Shoes

2.2.2 Emergency safety measures

* Water invasion
Please cut off the AC power supply of the system first and then disconnect all switches under the premise of ensuring safety.

* Electrolyte or gas leakage
If the battery pack leaks electrolyte, avoid contacting with the leaking liquid or gas. If one is exposed to the leaked substance, immediately perform the actions described below.

•Gas Inhalation: Evacuate the people from the contaminated area and seek medical aid immediately.

•Eye Contact: Flush your eye with clean and flowing water for 15 min, and then seek medical aid immediately.

•Skin Contact: Thoroughly rinse the exposed area with soap and water to be sure no chemical or soap is left on them, and seek medical aid immediately.

•Ingestion: Induce vomiting, and seek medical help immediately.

WARNING
In case of fire situations, please use carbon dioxide fire extinguisher rather than liquid to put out fires.

2.2.3 Other Tips

•All the product are strictly inspected before shipment.Please contact us for replacement if you notice there are any defectives such as swelling etc.

•Do not disassemble batteries and components, otherwise the manufacturer will not be responsible for any damage caused by unauthorized disassembly or repair.

•Enable the battery to be safely grounded before use to make sure the system in safe and normal operation.

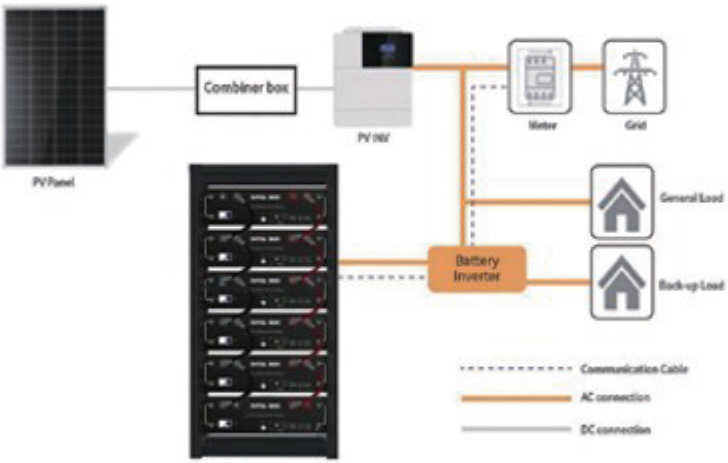
•Please ensure that the electric parameters of these devices are compatible mutually before connecting the battery to other devices.

•Please take the environmental factors into careful considerations to ensure that the system can work in a suitable condition as the environment and storage methods have a certain impact on the service life and reliability of this product.

III.Product Overview

3.1 Introduction

The DATOU BOSS battery is designed for residential application and works as a storage unit in the photovoltaic system. It is a 48V Li-ion battery storage system, with BMS inside itself. It could be operated in both on-grid, back-up and off-grid modes with compatible inverters. Below is the general schematic of an ac-coupled system.



CAUTION

This electrical connection in this diagram is only for illustration. Please follow the manual suggestions of related devices and operate in accordance with locally applicable connection requirements, standards, and directives.

3.2 Features

•With highest safety, battery is made from LiFePO4 chemistry and complies with highest international safety and transport standard.

•Modular and flexible, it can support up to 15 batteries connected together to expand the system energy.

•Built-in pre-charge circuit to avoid rush current when connecting with different inverters/chargers.

•Automatic dynamic addressing function when connecting multiple batteries together.

•It can support a maximum of 96% DOD under off-grid and back-up application.

•Built-in BMS provides warning and protection functions including over-discharging, over-charging, over- current, short-circuit and high/low temperature.

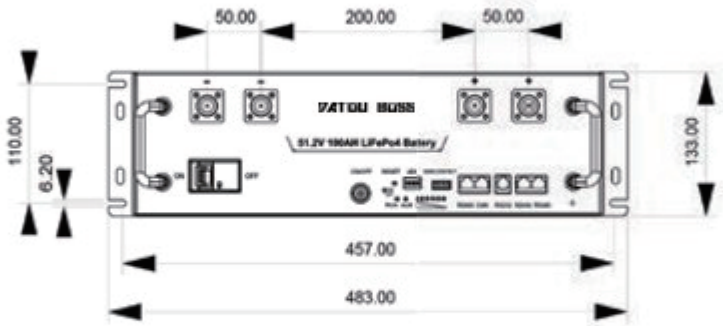
•LiFePO4 is equipped with automatic balancing function to meet long cycle life. New batteries need to go through multiple charge - cycles (approximately 10 times) to reach their maximum capacity.

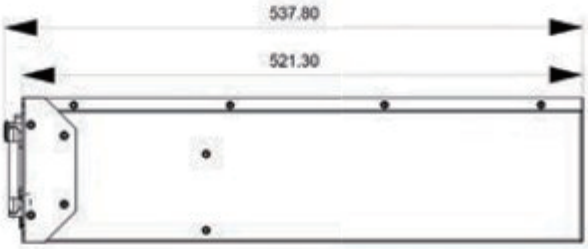
•Compact size and light weight for easy installation and maintenance.

•CAN/RS485 port for external communication.

3.3 Specification

3.3.1 Dimension





3.3.2 Parameters

Items	DT-3U-48100
Rated voltage	51.2V
Operating voltage range	40.5~54.75V
Charge voltage	58.4V
Low voltage cut-off	40.0V
Nominal energy	5.12kWh
Usable energy	5.12kWh
Nominal capacity	100Ah

Dimension	22.09*19.02*5.24in/56.1*48.3*13.3cm	
Weight	94.8lb/43kg	
Standard charge current	≤50A	
Max. charge current	100A	
Max. discharge current	100A(initial temp. ≤35℃)	
Communication port	RS485 /CAN/RS232	
Max. parallel number	15pcs	
Operating temperature	Charge: 0~55℃	Discharge: -20~55℃
Storage temperature	-20~25℃	Less than 1 year
	20~40℃	less than 3 months
	Environment at the shipment state	60±25%R.H.

BMS Parameters			
Charge	Spec	Delay	Recovery
Cell Voltage Protection	3600mV	3000mS	3400mV
Module Voltage Protection	58.4V	3000mS	54.4V
Charge Over Current 1	105A	2000mS	
Charge Over Current 2	120A	2000mS	
Temperature Protection	<32°F/0°C or >149°F/65°C		

Discharge	Spec	Delay	Recovery
Cell Voltage Protection	2500mV	3000mS	3000mV
Module Voltage Protection	40.0V	3000mS	48.0V
Discharge Over Current 1	105A	2000mS	
Discharge Over Current 2	120A	2000mS	
Short Circuit	1200A	400uS	
Temperature Protection	<-4°F/-20°C or >149°F/65°C		

BMS	Parameter		Condition
PCB Temperature Protection	>221°F/105°C		
Cell Balance	60mV charging equalization		
Temperature Accuracy	±3°C		
Cell Voltage Accuracy	±10mV		For Cells
Current Accuracy	±2%		
SOC	5%		
Power Consumption	Off Mode	≤20uA	Storage/Transport
	Sleep Mode	≤200uA	Sleeping
	Operating Mode	≤60mA	Charging/Discharging
Communication Ports	RS485、CAN、RS232		
Bluetooth&Wifi Signal Distance	≥49 feet/15m		

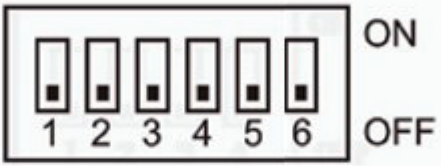
The optimum operating temperature range is from 15 C to 30 C. Frequent exposure to the harsh temperatures may worsen the performance of the battery pack and its cycle life.

3.3.3 Panel Interface

DT-3U-48100

NO.	Items	Usage description	Remark
A	Handles	For handling, intallation and disasembly of battery	
B	Grounding	Used to connect battery with ground	
C	Negative terminal	Used to connect the inverter/charger	
D	Positive terminal	Used to connect the inverter/charger	
E	125A breaker	Over-current protection	
F	Power switch	Used to Power on/off battery	
G	ON/OFF indicator	Indicates whether the battery is turned on or off	
H	Reset	Used to reset the BMS	
I	ADS	Used to set the address of the battery in the battery pack	
J	RUN	Used to show battery is in running status when lighting or flashing	
K	ALM	Used to show battery Alarm/ Protection status	
L	Dry contact	2 channels output signal 1 channel input signal	Pin1 on the left
M	SOC	Used to show battery real-time SOC	
N	RS485-1	Connect to host computer/inverter	
O	CAN	Connect to inverter	
P	RS232	Connect to host computer/inverter	
Q	RS485 IN RS485 OUT	For communication between batteries	
R	Mounting ear	Used to fix with rack	

3.3.3.1 : ADS



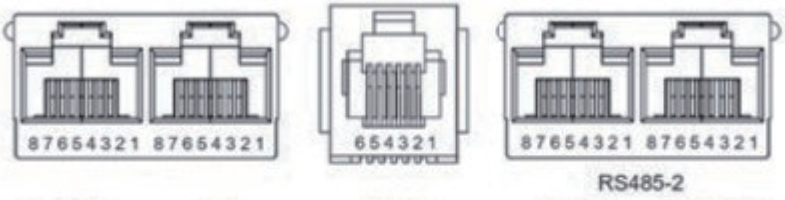
When PACK is used in parallel, the manual DIP address function is enabled when all DIP switches are dialed to OFF. Otherwise, use the default automatic addressing function. Use the DIP switch on the BMS to set the address to distinguish different packs.

地址位(二进制) Address bit (binary)	Explain						
	6	5	4	3	2	1	
0001(1)	NC	NC	OFF	OFF	OFF	ON	PACK1 (Set PACK1 to be used by a host)
0010(2)	NC	NC	OFF	OFF	ON	OFF	PACK2 (Set PACK2)
0011(3)	NC	NC	OFF	OFF	ON	ON	PACK3 (Set PACK3)
0100(4)	NC	NC	OFF	ON	OFF	OFF	PACK4 (Set PACK4)
0101(5)	NC	NC	OFF	ON	OFF	ON	PACK5 (Set PACK5)
0110(6)	NC	NC	OFF	ON	ON	OFF	PACK6 (Set PACK6)
0111(7)	NC	NC	OFF	ON	ON	ON	PACK7 (Set PACK7)
1000(8)	NC	NC	ON	OFF	OFF	OFF	PACK8 (Set PACK8)
1001(9)	NC	NC	ON	OFF	OFF	ON	PACK9 (Set PACK9)
1010(10)	NC	NC	ON	OFF	ON	OFF	PACK10 (Set PACK10)
1011(11)	NC	NC	ON	OFF	ON	ON	PACK11 (Set PACK11)
1100(12)	NC	NC	ON	ON	OFF	OFF	PACK12 (Set PACK12)
1101(13)	NC	NC	ON	ON	OFF	ON	PACK13 (Set PACK13)
1110(14)	NC	NC	ON	ON	ON	OFF	PACK14 (Set PACK14)
1111(15)	NC	NC	ON	ON	ON	ON	PACK15 (Set PACK15)

NOTICE

Failure to follow the DIP switch setting will cause the communication fault between battery and inverter. For detailed settings with different inverter/charger, please contact your supplier or ECO-WORTHY for consultation.

3.3.3.2 Communication Interface Pin Diagram

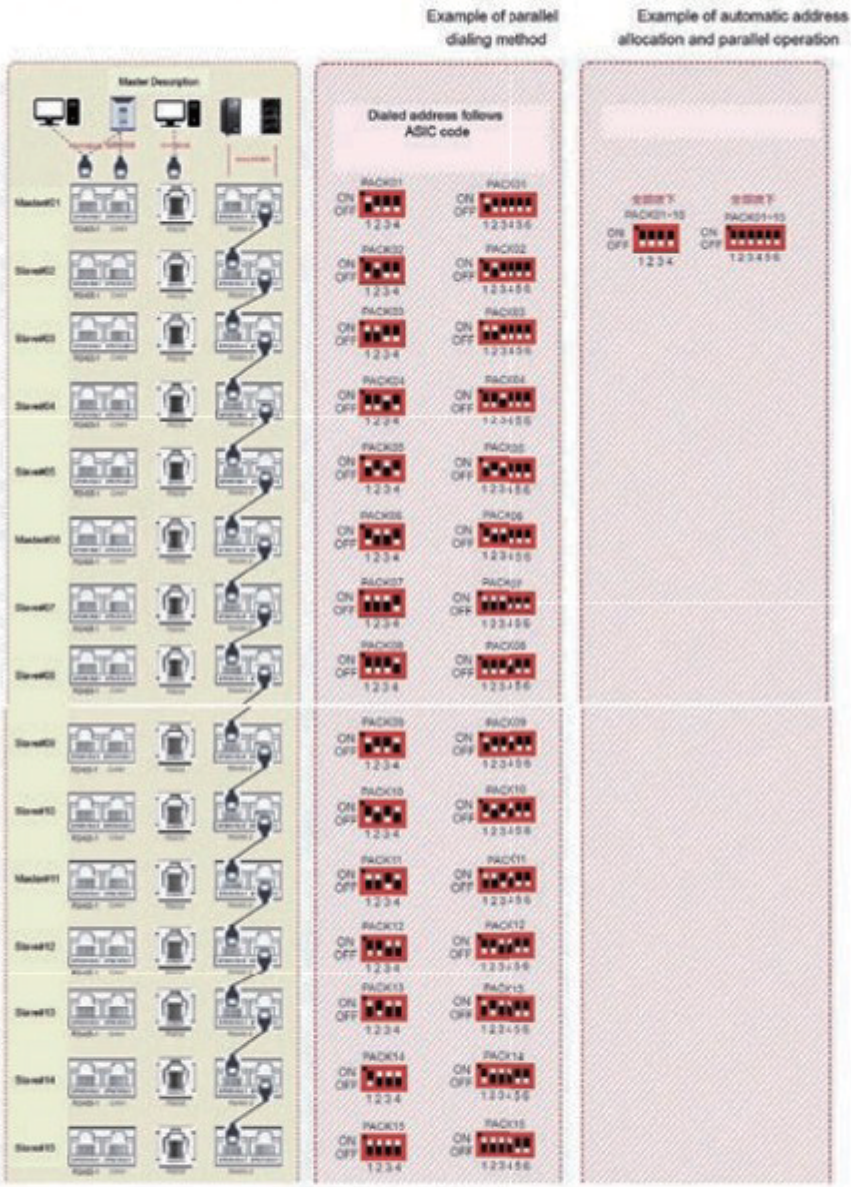


Communication Port	RS485-1		CAN		RS232		RS485-2*2	
Functional Description	Connect to host computer/inverter		Connect to host computer/inverter		Connect to host computer		Parallel communication*2	
Pin Description	PIN	Description	PIN	Description	PIN	Description	PIN	Description
	1,8	RS485-B1	1,8	NC	1,2,6	NC	1,8	RS485-B2
	2,7	RS485-A1	2,7	NC	3	TX	2,7	RS485-A2
	4	NC	4	CANH1	4	RX	4,5	NC
	5	NC	5	CANL1	5	GND	3	IN(L)/OUT(R)
	3,6	GND	3,6	GND			6	GND

The communication protocols/devices/software supported by each ports

PORT	RS485-1	CAN	RS232
USAGE	Connect to the inverter or upper computer	Connect to the inverter	Connect to the upper computer
SUPPORT	PYLON-LV RS485 V3.5 2019/08/07 (9600)	Pylon-CAN-V1.2-180408-lowVoltage	JBD-UP
	Growatt BMS-V1.09(1) -20201022	Growatt BMS CAN-Bus-protocol-low-voltage-V1.04	Solar Assistant
	VOLTRONIC-485-V1.0.3-200325	Victron-CAN-V1.00-210107	Overkill
	LXP-485-V1.0.0-210625	Luxpowertek Battery CAN Protocol-V1.0-20200211	
	Deye-485 Modbus Protocol(4)-deye -V1.30-20160801	SMA-CAN-V1.0.0-210630-FSS-ConnectingBat-TI-en-20W	
	SRNE_WOW_PACE_BMS_Modbus_Protocol_for_RS485_V1.3(2020-11-24)	Sofar-CAN-V1.00-211117-Rev6	
		PV1800F CAN communication Protocol1.04.04	
		SRNE_WOW_BMS_Modbus_Protocol_for_CAN_V1.0	
		DEYE CAN-V1.0-20220402	
		MREGAREVO-Hybrid Inverter Communication Protocol With BMS	

3.3.3.3 Parallel Wiring Instructions



NOTICE

Automatic coding method wiring: After wiring is completed, the main unit must be the last one to be turned on.

3.3.3.4 LED Description

LED Indicator Light Description

State of system	Event	MOS (LED9)	Run (LED8)	Alarm (LED7)	SOC(LED6~1) LED6	LED5	LED4	LED3	LED2	LED1	Description
		●	●	●	●	●	●	●	●	●	
(Power off)	(Sleep)	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	(All LEDs turn off)
static state	(Normal)	OFF	Flash1	OFF	Refer to table(4-11-2)						/
	(Alarm)	OFF	Flash1	Flash3							/
Charging	(Normal)	OFF	ON	OFF							/
	(Alarm)	OFF	ON	Flash3							The over voltage alarm does not flash
	(OV protect)	ON	ON	OFF	ON	ON	ON	ON	ON	ON	/
	(Temperature, Over-current, fail-safe)	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	/
Discharging	(Normal)	OFF	Flash 3	OFF	Refer to table(4-11-2)						
	(Alarm)	OFF	Flash 3	Flash 3							
	(UV protect)	ON	Flash2	OFF	OFF	OFF	OFF	OFF	OFF	OFF	/
	(Over-current, short circuit, temperature, fail-safe)	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	/

Important Notes:

1.Alarm: The ALM light alerts you to issues that may limit the inverter's charging or discharging current.

2.Standby Warning: The warning state in standby mode is triggered first by an alarm, then the device enters standby mode.

SOC Indicator Status (Battery Level)

(State)			(Charging)						(Discharging)					
LED		LED6 ●	LED5 ●	LED4 ●	LED3 ●	LED2 ●	LED1 ●	LED6 ●	LED5 ●	LED4 ●	LED3 ●	LED2 ●	LED1 ●
SOC(%)	0~16.6%	OFF	OFF	OFF	OFF	OFF	Flash2	OFF	OFF	OFF	OFF	OFF	ON
	16.6~33.2%	OFF	OFF	OFF	OFF	Flash2	ON	OFF	OFF	OFF	OFF	ON	ON
	33.2~49.8%	OFF	OFF	OFF	Flash2	ON	ON	OFF	OFF	OFF	ON	ON	ON
	49.8~66.4%	OFF	OFF	Flash2	ON	ON	ON	OFF	OFF	ON	ON	ON	ON
	66.4~83.0%	OFF	Flash2	ON	ON	ON	ON	OFF	ON	ON	ON	ON	ON
	83.0~100%	Flash2	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
RUN LED		ON						Flash 3					

LED flash description

(Flash Mode)	(ON)	(OFF)
Flash1	0.25S	3.75S
Flash2	0.5S	0.5S
Flash3	0.5S	1.5S

3.4 Protection

Items	Description	Remark
Charge End Cell/ PACK high-voltage	The BMS will stop charging if any cell or PACK voltage reaches the protection value and it will be auto-released only when both Pack and cel voltage back to the release voltage range or there is efficient discharge current.	
Discharge End Cell/ PACK low-voltage	The BMS wil stop discharging if any cell or PACK voltage is under the protection value and it will be released only when al the cell voltage back to the release voltage range or there is efficient charge current.	It can automatically recover. Please charge timely, otherwise it may be in Low-power mode to be over-discharged.
High temperature	The BMS will halt charging, discharging, or both if any cell, environment, or MOSFET temperature falls outside the acceptable range.	Automatic recovery
Low temperature	The BMS will stop charging or discharging or both if any cell/environment/MOS temperature is under the range.	Automatic recovery
Charge over-current	The BMS will stop charging when the charging current is higher than the protection value. And it will release from the protection when the system delays time is met.	It can automatically recover. If locked after three consecutive times, manual intervention is required.
Discharge over- current/ Overload	The BMS wil stop discharging when the discharging current is higher than the protection value. And it will release from the protection when the system delays time is met.	Automatic recovery. If locked after three consecutive times, manual intervention is required.
Short-circuit/ Reversed	Short-circuit and Reversed polarity protection happened	Charge to release Manual reset
Temperature, Voltage Current sensor failure	When entering the failure mode, manual intervention is required; no charging and discharging	Manual intervention
Dormancy mode	After reaching a certain condition, it will be in the dormancy mode.	Recoverable

CAUTION
Please re-charge the battery via solar, grid/generator or other energy source within 24h if the battery is over-discharged.

NOTICE
Manually short-circuit and reverse the battery will void the warranty.

IV.Installation

4.1 Preparation

4.1.1 Safety Compliance

The system installation must be finished by qualified person(s). During the whole installation process, please strictly follow the local safety regulations and related operating procedures.

4.1.2 Environment

The operating environment shall meet the following requirements:

Category	Description
Working temperature	-20°C-55°C(maximum operating range) 15°C-30°C (optimal temperature)
Relative humidity	5%~90%, No condensation
Altitude	<3000m
Safety requirement	•Do not expose the battery to direct sunlight, rain and snow. •Do not place the battery within children/pet touchable area. •Do not place the battery near heat source and flammable material. •Do not place the battery in a closed place where the ventilation is not available. •Do not drop, deform, impact, cut or spearing with a sharp object. •Do not put heavy things on battery. •Do not disassemble the battery without Manufacturer's permission. •No conductive dust and water or other liquid to contact battery. •Follow the emergency measure if there is water invasion or electrolyte and gas leakage. •Contact your supplier within 24 hours if any product failure happens.

4.1.3 Tools

Tools	
Screwdriver (slot, cross)	Multi-meter
Wrench	Clamp meters
Diagonal pliers	Insulating tape
Needle nose pliers	Thermometer (observe the installation environment)
Clamping pliers	Anti-static bracelet
Wire stripper	Cable ties

4.2 Inspection

4.2.1 Unpack precautions

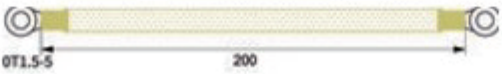
* Please load and unload it in accordance with the specified requirements to prevent sun and rain when you receive the equip ment.

* Please check and confirm the goods (such as quantity, appear ance, etc.) according to the "scope of delivery " before unpack ing.

* Do light take and put during unpacking process to protect the surface coating of the object;

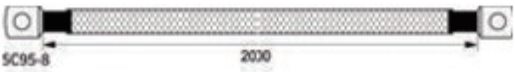
* Please record and contact to the manufacturer if the inner packing is damaged after unpacking.

General materials		
 Battery Pack *1pcs	 Manual *1pcs	 Communication cable *1pcs

Optional materials		
Type	**Details**	**Qty.**
Battery to Battery Communica-tion Cable		1PCS
Parallel Cables	A: Battery to Battery positive cable(2AWG 200mm RED) 	1PCS
	B: Battery to Battery negetive cable(2AWG 200mm BLACK) 	1PCS
Grounding Cable		1PCS

4.2.2 External cable kits

Cables connected to inverter or junction box belong to External Cable kits. It is NOT included in battery carton. Customers need buy it separately, and the information are as below.

Type	Detail	Qty.
Cables	C: Battery to Inverter positive cable(2/0AWG 2000mm RED)  	1PCS
	D: Battery to Inverter negetive cable(2/0AWG 2000mm BLACK)  	1PCS

NOTICE
Keep the unused cable pins NULL to avoid affecting the closed loop communication.

NOTICE
A ground connection of communication cable may be required from some inverters. Please follow the rules from inverter manufacure.

4.3 Start Installation

Qualified person

4.3.1 Remainder

Please check again whether the following conditions or equipment meet the requirements before installation:

* Check if there' s enough space for installation, and if the load-bearing capacity of the bracket or cabinet meets the weight requirements;

* Check whether the power cable pair(s) used meets the maximum current requirement for operation;

* Check whether the overall layout of power supply equipment and batteries at the construction site is reasonable;

* Check whether the installer is wearing anti-static wristband;

* Check whether there' re two people on the construction site for installation work;

* Check if there' s potential risks at location of installation site, e.g flooding, sun exposure, corrosion,and salt spray.

4.3.2 Procedures

CAUTION

Injuries may result if the product is lifted incorrectly or dropped while being transported or mounted. Wear suitable personal protective equipment for all work on the product.

CAUTION

Ensure that no lines are laid in the wall which could be damaged when drilling holes.

4.3.2.1 Install the Battery

1 Insert the Battery into the Rack Slot

NOTICE
For any other installations, please avoid the battery directly contacting the ground and avoid of high salinity, humidity to prevent the product from rusting and corrosion.

4.3.2.1 Install the Battery

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For any other installations, please avoid the battery directly contacting the ground and avoid of high salinity, humidity to prevent the product from rusting and corrosion.

4.3.2.2 Set the inverter communication protocol

1 Turn on the battery

① Open 125A Circuit Breaker

② Press the POWER button

2 Use the mobile app to set the communication protocol

① Scan the QR code to download the software

② Open the software and search for nearby devices (please turn on Bluetooth on your phone and grant Bluetooth permissions)

③ Modify the Inverter Protocol on the Parameter page(For more detailed information, please refer to APP-Quick Start)

4.3.2.3 Connect the battery to the inverter

1 Battery-inverter power connection

Note: Please turn off the POWER button and the breaker before connecting the cables. Use the cables required by the inverter to connect the battery pack to the BAT input terminal of the inverter.

2 Battery-inverter communication connection

Use a standard Ethernet cable to connect the battery's RS485-1 or CAN port to the BMS communication port of the inverter.

CAUTION

Confirm inverter AC input and PV input are disconnected before wiring connection, and the DC/ signal switch of inverter/charg er is in off status.

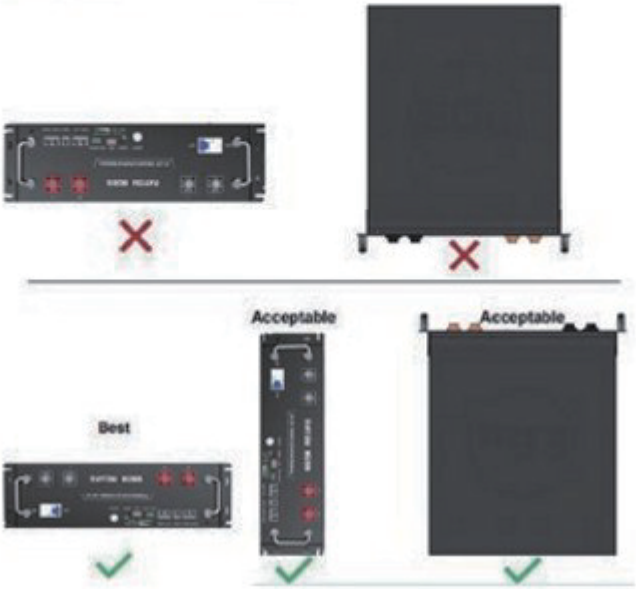
NOTE
Choose the suitable disconnection breaker considering the inverter power/current, rated voltage, and tripping characteristic etc.

NOTICE
The maximum communication cable length is required to be less than 15m between inverter/charger and battery.
The maximum power cable length is suggested to be less than 10m between inverter/charger and battery.

CAUTION
The maximum tolerance current of each power cable and terminal is 125A, and 100A for continuously is suggested. Please use corresponding number of power cable pairs according to the field configuration and local connection requirements, standards, and directives.

V. Caution

CAUTION:
Never position the battery upside down or face down!



VI.Troubleshooting

Items	Solution	Measure
Unable to start	1. Switch on battery and press RESET for 6s to observe whether the battery can be started. 2. Charge the battery with a charge or inverter to provide 54-57.6V voltage and observe whether it can be started.	If the abnormal status is still alive after these steps, please contact your supplier.
Unable to charge	1. Check whether the cable connection between the battery and the inverter/charger is correct. 2. Check whether the inverter/charger setting is correct. 3. Check whether the battery is in charge protection mode; if yes, try to discharge the battery.	
Unable to discharge	1. Check whether the cable connection between the battery and the inverter/charger is correct. 2. Check whether the battery occurs short circuit, reverse connection, pre-charge failure during connection inverter etc. 3. Check whether the battery is in discharge protection mode; if yes, try to charge the battery.	
High/Low temperature	1. Stop the battery system for a while, and check whether the installation location temperature meets the requirement. 2. Avoid continuous full charging and discharging.	If there is any other situation(s) excluding in this table, turn off the faulty battery, and contact your supplier.
High current	Check whether the configuration and parameters setting on the inverter/charger is correct.	
ALM ON	Turn off all the batteries, and remove the fault battery from the system.	
Communication fail	1. Check whether the communication cable type is correct and is contacted well. 2. Check whether the DIP switch setting is correct. 3. Check whether the inverter protocol related setting is correct. 4. Check whether both battery and inverter are working properly.	

NOTICE
Please restart after software is upgraded.

VII.Transport and Storage

* Do not violently shake, impact or squeeze, and prevent sun and rain during the transportation.

* Do light take and put and strictly prevent falling, rolling, and heavy pressure during loading and unloading.

* The battery should be placed in a dry, clean, dark, and well-ventilated indoor environment for long- term storage, and the recommended storage temperature range is 15~30°C .

* No harmful gases, flammable and explosive products and corrosive chemical substances in the storage location.

* The batteries should be stored and transported in close to 50% SOC, and do not store over 80% SOC for long time.

* The battery needs to be charged every 6 months if it is not used for a long time.

* No fall down, no pile up over 6 layers, and keep face up.

VIII.Disposal of battery

Disposal of battery must comply with the local applicable disposal regulations for electronic waste and used batteries. Please review your local battery recycling or management regulations or contact DATOU BOSS for more information.

DATOU BOSS

Version: 1.1.1

LiFePO4

51,2 V, 100 Ah, $LiFePO_4$ BATTERIE 3U HANDBUCH

Betrieb und Wartung

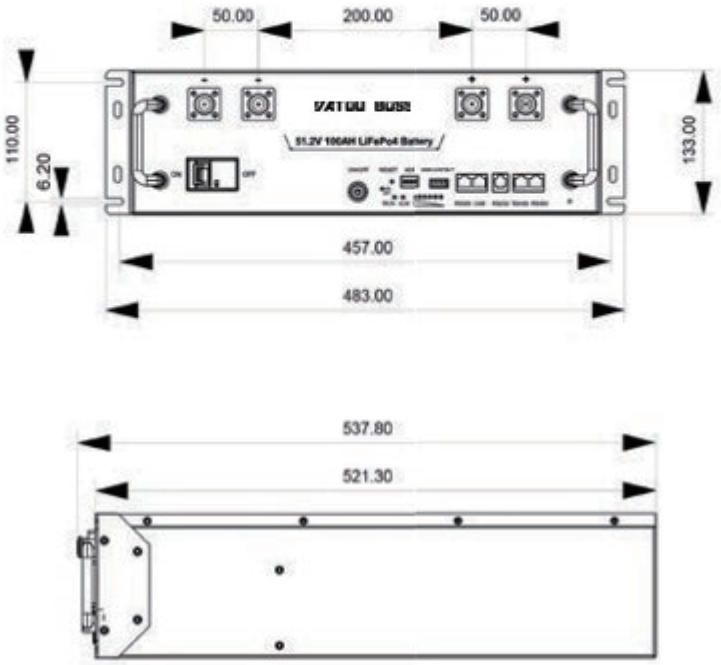
SUPPORT

Sollten Sie technische Probleme haben und in dieser Anleitung keine Lösung finden, wenden Sie sich bitte an DATOU BOSS, um weitere Unterstützung zu erhalten.

* E-Mail: Manager@xdatou.com
* Website: www.xdatou.com
* Telefon/WeChat/WhatsApp/LINE: +86 137 8353 1376

3.3 Spezifikation

3.3.1 Abmessung



3.3.2 Parameter

Daten	DT-3U-48100
Nennspannung	51,2 V
Betriebsspannungsbereich	40,5–54,75 V
Ladespannung	58,4 V
Unterspannungsabschaltung	40,0 V
Nennenergie	5,12 kWh
Nutzbare Energie	5,12 kWh
Nennkapazität	100 Ah

Abmessungen	22,09 × 19,02 × 5,24 Zoll / 56,1 × 48,3 × 13,3 cm	
Gewicht	94,8 lb / 43 kg	
Standard-Ladestrom	≤ 50 A	
Max. Ladestrom	100 A	
Max. Entladestrom	100 A (Anfangstemperatur < 35 °C)	
Kommunikationsanschluss	RS485 /CAN/RS232	
Max. Anzahl an parallelen Geräten	15 Stück	
Betriebstemperatur	Ladevorgang: 0–55 °C Entladevorgang: -20–55 °C	
Lagertemperatur	-20 bis 25 °C	Weniger als 1 Jahr
	20 bis 40 °C	Weniger als 3 Monate
	Umgebungsbedingungen im Versandzustand	60 ± 25 % r. F.

BMS-Parameter			
Ladevorgang	Technische Daten	Verzögerung	Wiederherstellung
Zellspannungsschutz	3600 mV	3000 ms	3400 mV
Modulspannungsschutz	58,4 V	3000 ms	54,4 V
Ladeüberstrom 1	105 A	2000 ms	
Ladeüberstrom 2	120 A	2000 ms	
Temperaturschutz	< 0 °C oder > 65 °C		

BMS-Parameter			
Entlassung	Technische Daten	Verzögerung	Wiederherstellung
Zellspannungsschutz	2500 mV	3000 ms	3400 mV
Modulspannungsschutz	40,0 V	3000 ms	48,0 V
Entladungsüberstrom 1	105 A	2000 ms	
Entladungsüberstrom 2	120 A	2000 ms	
Kurzschluss	1200 A	400 us	
Temperaturschutz	< -4 °F / -20 °C oder > 149 °F / 65 °C		

BMS	Parameter		Zustand
Temperaturschutz der Leiterplatte	>221 °F/105 °C		
Zellenausgleich	60 mV Ladungsausgleich		
Temperaturgenauigkeit	±3 °C		
Zellspannungsgenauigkeit	+10 mV		Für Handy
Stromgenauigkeit	±2 %		
Ladezustand (SOC)	5 %		
Parameter	Aus-Modus	≤20 μA	Aufbewahrung/Transport
	Ruhemodus	≤200 μA	Schlafen
	Betriebsmodus	≤60 mA	Aufladen/Entladen
Schnittstellen	RS485, CAN, RS232		
Reichweite von Bluetooth- und WLAN-Signalen	>49 Fuß/15 m		

Der optimale Betriebstemperaturbereich liegt zwischen 15 °C und 30 °C. Häufige Einwirkung extremer Temperaturen kann die Leistung des Akkus und dessen Lebensdauer beeinträchtigen.

3.3.3 Bedienfeldschnittstelle

DT-3U-48100

NO.	Elemente	Anwendungsbeschreibung	Anmerkung
A	Handles	Für die Handhabung, den Einbau und die Demontage der Batterie	
B	Grounding	Dient zum Anschluss der Batterie an Masse	
C	Negative terminal	Dient zum Anschluss des Wechselrichters/Ladegeräts	
D	Positive terminal	Dient zum Anschluss des Wechselrichters/Ladegeräts	
E	125A breaker	Überstromschutz	
F	Power switch	Zum Ein- und Ausschalten der Batterie	
G	ON/OFF indicator	Zeigt an, ob die Batterie ein- oder ausgeschaltet ist	
H	Reset	Zum Zurücksetzen des BMS	
I	ADS	Zum Einstellen der Adresse der Batterie im Batteriepack	
J	RUN	Zeigt durch Leuchten oder Blinken an, dass die Batterie in Betrieb ist	
K	ALM	Dient zur Anzeige des Alarm-/ Schutzstatus der Batterie	
L	Dry contact	2 Kanäle Ausgangssignal, 1 Kanal Eingangssignal	Pin 1 auf der linken Seite
M	SOC	Dient zur Anzeige des aktuellen Ladezustands (SOC) der Batterie	
N	RS485-1	Anschluss an Host-Computer/ Wechselrichter	
O	CAN	Anschluss an Wechselrichter	
P	RS232	Anschluss an Host-Computer/ Wechselrichter	
Q	RS485 IN RS485 OUT	Zur Kommunikation zwischen den Batterien	
R	Mounting ear	Zur Befestigung am Rack	

DATOU BOSS

Version: 1.1.1

LiFePO4

51,2 V 100 Ah LiFePO4 BATTERIE 3U MANUEL

Utilisation et entretien

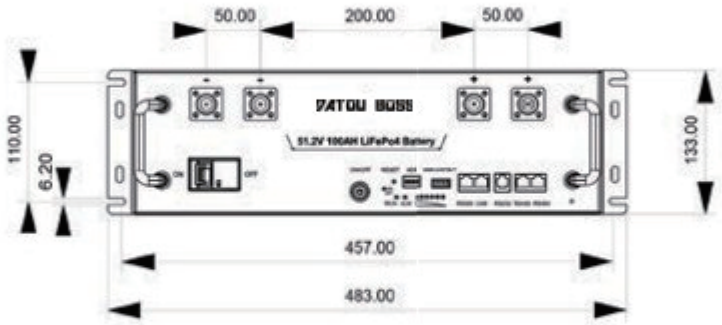
ASSISTANCE

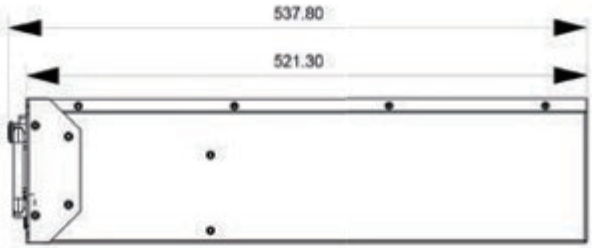
Si vous rencontrez des problèmes techniques et que vous ne trouvez pas de solution dans ce manuel, veuillez contacter DATOU BOSS pour obtenir de l'aide.

* E-mail : Manager@xdatou.com
* Site web : www.xdatou.com
* Téléphone/WeChat/WhatsApp/LINE : +86 137 8353 1376

3.3 Spécifications

3.3.1 Dimensions





3.3.2 Paramètres

Caractéristiques	DT-3U-48100
Tension nominale	51,2 V
Plage de tension de fonctionnement	40,5-54,75 V
Tension de charge	58,4 V
Seuil de coupure en cas de sous-tension	40,0 V
Énergie nominale	5,12 kWh
Énergie utile	5,12 kWh
Capacité nominale	100 Ah

Dimensions	56,1 × 48,3 × 13,3 cm	
Poids	43 kg	
Courant de charge nominal	≤ 50 A	
Courant de charge maximal	100 A	
Courant de décharge maximal	100 A (temp. initiale < 35 °C)	
Port de communication	RS485 / CAN / RS232	
Nombre maximal d'unités en parallèle	15 pièces	
Température de fonctionnement	Charge : 0 à 55 °C Décharge : -20 à 55 °C	
Température de stockage	-20 à 25 °C	Moins d'un an
	20 à 40 °C	moins de 3 mois
	Conditions ambiantes à l'expédition	60 ± 25 % d'humidité relative

Paramètres du système de gestion de la batterie (BMS)			
Charge	Spécifications	Retard	Récupération
Protection contre les surtensions de cellule	3600 mV	3000 ms	3400 mV
Protection contre les surtensions de module	58,4 V	3000 ms	54,4 V
Surintensité de charge 1	105 A	2000 ms	
Surintensité de charge 2	120 A	2000 ms	
Protection thermique	< 0 °C ou > 65 °C		

Décharge	Spécifications	Retard	Récupération
Protection contre les tensions de cellule	2500 mV	3000 ms	3400 mV
Protection contre les tensions de module	40,0 V	3000 ms	48,0 V
Surintensité de décharge 1	105 A	2000 ms	
Surintensité de décharge 2	120 A	2000 ms	
Court-circuit	1200 A	400 us	
Protection thermique	< -4 °F / -20 °C ou > 149 °F / 65 °C		

BMS	Paramètre		Condition
Protection thermique du circuit imprimé	>105 °C		
Équilibre des cellules	Égalisation de charge de 60 mV		
Précision de la température	±3 °C		
Précision de la tension des cellules	±10 mV		Pour les batteries
Précision du courant	±2 %		
État de charge (SOC)	5 %		
Consommation électrique	Mode arrêt	≤20 μA	Stockage/Transport
	Mode veille	≤200 μA	Mise en veille
	Mode de fonctionnement	≤60 mA	Charge/Décharge
Ports de communication	RS485, CAN, RS232		
Portée du signal Bluetooth et Wi-Fi	≥ 49 pieds / 15 m		

La plage de température de fonctionnement optimale se situe entre 15 °C et 30 °C. Une exposition fréquente à des températures extrêmes peut nuire aux performances de la batterie et réduire sa durée de vie.

3.3.3 Interface du panneau

DT-3U-48100

NO.	Éléments	Description de l'utilisation	Remarque
A	Handles	Pour la manipulation, l'installation et le démontage de la batterie	
B	Grounding	Permet de relier la batterie à la masse	
C	Negative terminal	Permet de connecter l'onduleur/ chargeur	
D	Positive terminal	Permet de connecter l'onduleur/ chargeur	
E	125A breaker	Protection contre les surintensités	
F	Power switch	Permet d'activer/ désactiver la batterie	
G	ON/OFF indicator	Indique si la batterie est activée ou désactivée	
H	Reset	Permet de réinitialiser le BMS	
I	ADS	Permet de configurer l'adresse de la batterie dans le pack de batteries	
J	RUN	Indique que la batterie est en fonctionnement lorsqu'elle s'allume ou clignote	
K	ALM	Indique l'état d'alarme/ de protection de la batterie	
L	Dry contact	2 canaux de signal de sortie, 1 canal de signal d'entrée	Broche 1 à gauche
M	SOC	Affiche l'état de charge (SOC) de la batterie en temps réel	
N	RS485-1	Connexion à l'ordinateur hôte/ à l'onduleur	
O	CAN	Connexion à l'onduleur	
P	RS232	Connexion à l'ordinateur hôte/ à l'onduleur	
Q	RS485 IN RS485 OUT	Pour la communication entre les batteries	
R	Mounting ear	À utiliser pour la fixation au rack	

DATOU BOSS

Version: 1.1.1

LiFePO4

51,2 V 100 Ah LiFePO4 BATTERIA 3U MANUALE

Funzionamento e manutenzione

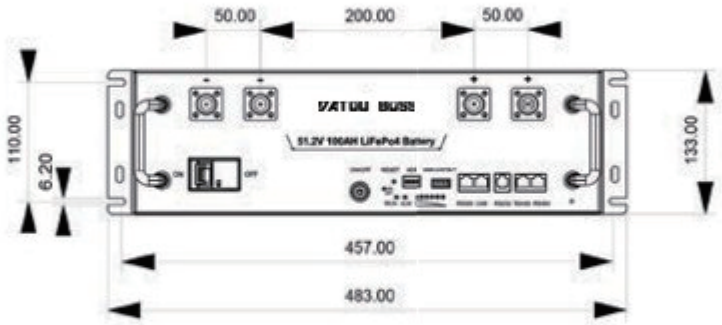
ASSISTENZA

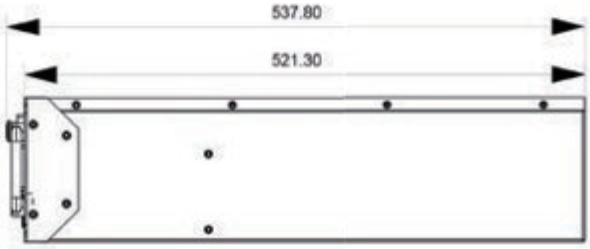
Se riscontri problemi tecnici e non riesci a trovare una soluzione in questo manuale, contatta DATOU BOSS per ricevere ulteriore assistenza.

* E-mail: Manager@xdatou.com
* Sito web: www.xdatou.com
* Telefono/WeChat/WhatsApp/LINE: +86 137 8353 1376

3.3 Specifiche

3.3.1 Dimensioni





3.3.2 Parametri

Caratteristiche	DT-3U-48100
Tensione nominale	51,2 V
Intervallo di tensione di funzionamento	40,5-54,75 V
Tensione di carica	58,4 V
Interruzione per bassa tensione	40,0 V
Energia nominale	5,12 kWh
Energia utilizzabile	5,12 kWh
Capacità nominale	100 Ah

Dimensioni	22,09 × 19,02 × 5,24 pollici / 56,1 × 48,3 × 13,3 cm	
Peso	94,8 libbre / 43 kg	
Corrente di carica standard	≤50 A	
Corrente di carica massima	100 A	
Corrente di scarica massima	100 A (temperatura iniziale ≤35 °C)	
Porta di comunicazione	RS485 / CAN / RS232	
Numero massimo di unità in parallelo	15 pezzi	
Temperatura di esercizio	Carica: 0~55 °C Scarica: -20~55 °C	
Temperatura di stoccaggio	-20~25 °C	Meno di 1 anno
	20~40 °C	meno di 3 mesi
	Condizioni ambientali al momento della spedizione	60 ± 25% di umidità relativa

Parametri BMS			
Ricarica	Specifiche	Ritardo	Ripristino
Protezione tensione cella	3600 mV	3000 ms	3400 mV
Protezione tensione modulo	58,4 V	3000 ms	54,4 V
Sovracorrente in carica 1	105 A	2000 ms	
Sovracorrente in carica 2	120 A	2000 ms	
Protezione termica	< 0 °C o > 65 °C		

Scarica	Specifiche	Ritardo	Recupero
Protezione tensione cella	2500 mV	3000 ms	3400 mV
Protezione tensione modulo	40,0 V	3000 ms	48,0 V
Sovracorrente in scarica 1	105 A	2000 ms	
Sovracorrente in scarica 2	120 A	2000 ms	
Cortocircuito	1200 A	400 us	
Protezione termica	< -4 °F / -20 °C o > 149 °F / 65 °C		

BMS	Parametro		Condizione
Protezione termica del PCB	>221 °F/105 °C		
Bilanciamento delle celle	60 mV di ricarica equalizzazione		
Precisione della temperatura	±3 °C		
Precisione della tensione delle celle	±10 mV		Per le celle
Precisione della corrente	±2 %		
SOC	5 %		
Consumo energetico	Modalità spenta	≤20 μA	Conservazione/Trasporto
	Modalità standby	≤200 μA	Messa in stand-by
	Modalità operativa	≤60 mA	Ricarica/Scarica
Porte di comunicazione	RS485, CAN, RS232		
Portata del segnale Bluetooth e Wi-Fi	≥49 piedi/15 m		

L'intervallo di temperatura di funzionamento ottimale va da 15 °C a 30 °C. L'esposizione frequente a temperature estreme può compromettere le prestazioni del pacco batterie e ridurne la durata.

3.3.3 Interfaccia del pannello

DT-3U-48100

NO.	Articoli	Descrizione dell'uso	Osservazioni
A	Handles	Per la movimentazione, l'installazione e lo smontaggio della batteria	
B	Grounding	Utilizzato per collegare la batteria alla massa	
C	Negative terminal	Utilizzato per collegare l'inverter/ caricabatterie	
D	Positive terminal	Utilizzato per collegare l'inverter/ caricabatterie	
E	125A breaker	Protezione da sovracorrente	
F	Power switch	Serve per accendere/ spegnere la batteria	
G	ON/OFF indicator	Indica se la batteria è accesa o spenta	
H	Reset	Serve per resettare il BMS	
I	ADS	Serve per impostare l'indirizzo della batteria nel pacco batterie	
J	RUN	Serve per indicare che la batteria è in carica quando la spia è accesa o lampeggia	
K	ALM	Utilizzato per visualizzare lo stato degli allarmi/della protezione della batteria	
L	Dry contact	2 canali di segnale in uscita, 1 canale di segnale in ingresso	Broche 1 à gauche
M	SOC	Utilizzato per visualizzare lo stato di carica (SOC) della batteria in tempo reale	
N	RS485-1	Collegamento al computer host/ inverter	
O	CAN	Collegare all'inverter	
P	RS232	Collegare al computer host/ all'inverter	
Q	RS485 IN RS485 OUT	Per la comunicazione tra le batterie	
R	Mounting ear	Da utilizzare per il fissaggio al rack	

DATOU BOSS

Version: 1.1.1

LiFePO4

51,2 V, 100 Ah, $LiFePO_4$ BATERÍA 3U MANUAL

Funcionamiento y mantenimiento

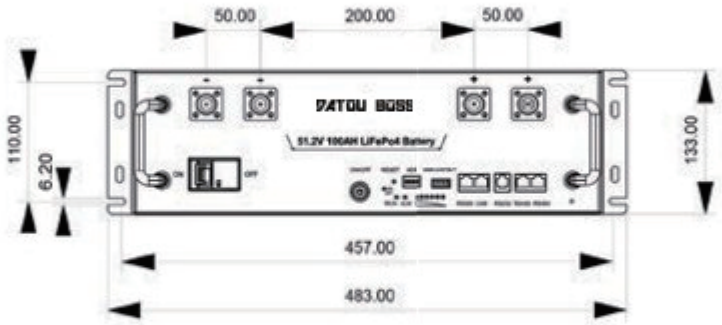
ASISTENCIA TÉCNICA

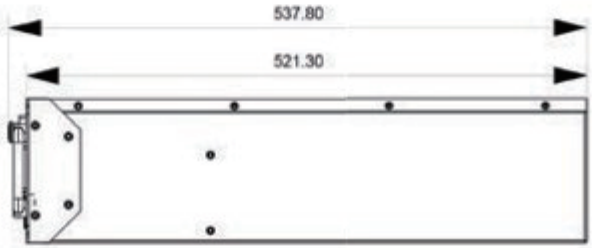
Si tiene problemas técnicos y no encuentra una solución en este manual, póngase en contacto con DATOU BOSS para obtener más ayuda.

- Correo electrónico: Manager@xdatou.com
- Sitio web: www.xdatou.com
- Teléfono/WeChat/WhatsApp/LINE: +86 137 8353 1376

3.3 Especificaciones

3.3.1 Dimensiones





3.3.2 Parámetros

Características	DT-3U-48100
Tensión nominal	51,2 V
Rango de tensión de funcionamiento	40,5-54,75 V
Tensión de carga	58,4 V
Corte por baja tensión	40,0 V
Energía nominal	5,12 kWh
Energía útil	5,12 kWh
Capacidad nominal	100 Ah

Dimensiones	56,1 × 48,3 × 13,3 cm	
Peso	43 kg	
Corriente de carga estándar	≤50 A	
Corriente de carga máxima	100 A	
Corriente de descarga máxima	100 A (temperatura inicial ≤35 °C)	
Puerto de comunicación	RS485 / CAN / RS232	
Número máximo de unidades en paralelo	15 unidades	
Temperatura de funcionamiento	Carga: 0~55 °C Descarga: -20~55 °C	
Temperatura de almacenamiento	-20~25 °C	Menos de 1 año
	20~40 °C	menos de 3 meses
	Condiciones ambientales en el momento del envío	60 ± 25 % de humedad relativa

Parámetros del BMS			
Carga	Especificaciones	Retardo	Recuperación
Protección de tensión de celda	3600 mV	3000 ms	3400 mV
Protección de tensión de módulo	58,4 V	3000 ms	54,4 V
Sobrecorriente de carga 1	105 A	2000 ms	
Sobrecorriente de carga 2	120 A	2000 ms	
Protección de temperatura	<32 °F/0 °C o >149 °F/65 °C		

Descarga	Especificaciones	Retardo	Recuperación
Protección de tensión de célula	2500 mV	3000 ms	3400 mV
Protección de tensión de módulo	40,0 V	3000 ms	48,0 V
Sobrecorriente de descarga 1	105 A	2000 ms	
Sobrecorriente de descarga 2	120 A	2000 ms	
Cortocircuito	1200 A	400 us	
Protección de temperatura	<-4 °F/-20 °C o >149 °F/65 °C		

BMS	Parámetro		Condición
Protección térmica de la placa de circuito impreso	>221 °F/105 °C		
Equilibrio de las celdas	60 mV de ecualización de carga		
Precisión de la temperatura	±3 °C		
Precisión del voltaje de las celdas	+10 mV		Para móviles
Precisión de la corriente	±2 %		
Estado de carga (SOC)	5 %		
Consumo de energía	Modo apagado	≤20 μA	Almacenamiento/ Transporte
	Modo de reposo	≤200 μA	En modo de espera
	Modo de funcionamiento	≤60 mA	Carga/Descarga
Puertos de comunicación	RS485, CAN, RS232		
Alcance de la señal de Bluetooth y Wi-Fi	≥49 pies/15 m		

El rango de temperatura de funcionamiento óptimo es de 15 ℃ a ℃. La exposición frecuente a temperaturas extremas puede afectar negativamente al rendimiento de la batería y a su vida útil.

3.3.3 Interfaz del panel

DT-3U-48100

NO.	Artículos	Descripción del uso	Observación
A	Handles	Para la manipulación, instalación y desmontaje de la batería	
B	Grounding	Se utiliza para conectar la batería a masa	
C	Negative terminal	PSe utiliza para conectar el inversor/cargador	
D	Positive terminal	Se utiliza para conectar el inversor/cargador	
E	125A breaker	Protección contra sobrecorriente	
F	Power switch	Se utiliza para encender y apagar la batería	
G	ON/OFF indicator	Indica si la batería está encendida o apagada	
H	Reset	Se utiliza para reiniciar el BMS	
I	ADS	Se utiliza para configurar la dirección de la batería en el paquete de baterías	
J	RUN	Se utiliza para indicar que la batería está en funcionamiento cuando se ilumina o parpadea	
K	ALM	Se utiliza para indicar el estado de alarma/protección de la batería	
L	Dry contact	2 canales de señal de salida y 1 canal de señal de entrada	Pin 1 a la izquierda
M	SOC	Se utiliza para mostrar el estado de carga (SOC) de la batería en tiempo real	
N	RS485-1	Conectar al ordenador central/inversor	
O	CAN	Conectar al inversor	
P	RS232	Conectar al ordenador central/inversor	
Q	RS485 IN RS485 OUT	Para la comunicación entre baterías	
R	Mounting ear	Se utiliza para fijarlo al bastidor	

DATOU BOSS

Version: 1.1.1

LiFePO4

51,2 В, 100 А·ч, LIFEPO4

АККУМУЛЯТОР 3U

РУКОВОДСТВО

Эксплуатация и техническое обслуживание

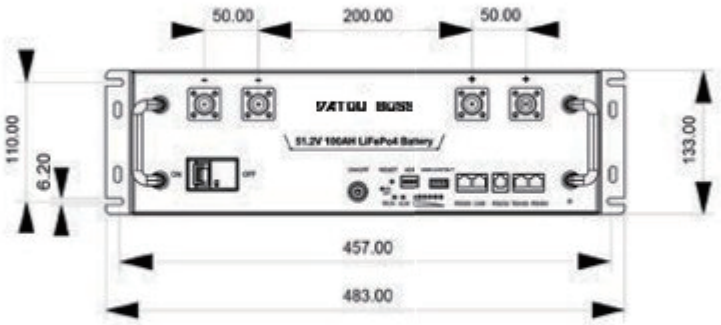
ПОДДЕРЖКА

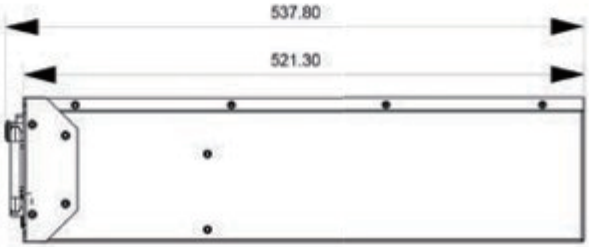
Если у вас возникли технические проблемы и вы не можете найти решение в данном руководстве, обратитесь в DATOU BOSS для получения дополнительной помощи.

- Электронная почта: Manager@xdatou.com
- Веб-сайт: www.xdatou.com
- Телефон/WeChat/WhatsApp/LINE: +86 137 8353 1376

3.3 Технические характеристики

3.3.1 Габаритные размеры





3.3.2 Параметры

Параметры	DT-3U-48100
Номинальное напряжение	51,2 В
Диапазон рабочего напряжения	40,5–54,75 В
Напряжение заряда	58,4 В
Отключение при пониженном напряжении	40,0 В
Номинальная энергия	5,12 кВт·ч
Полезная энергия	5,12 кВт·ч
Номинальная емкость	100 А·ч

Размеры	22,09 × 19,02 × 5,24 дюйма / 56,1 × 48,3 × 13,3 см	
Вес	94,8 фунта / 43 кг	
Стандартный ток заряда	≤50 A	
Максимальный ток заряда	100 A	
Максимальный ток разряда	100 A (начальная температура ≤35 °C)	
Порт связи	RS485 / CAN / RS232	
Максимальное количество устройств в параллельном режиме	15 шт.	
Рабочая температура	Зарядка: 0–55 °C Разрядка: –20–55 °C	
Температура хранения	-20–25 °C	Менее 1 года
	20–40 °C	Менее 3 месяцев
	Условия окружающей среды при отгрузке	60 ± 25 % относительной влажности

Параметры системы управления батареей			
Заряд	**Характеристики**	**Задержка**	**Восстановление**
Защита от перенапряжения элементов	3600 mV	3000 ms	3400 mV
Защита от перенапряжения модулей	58,4 V	3000 ms	54,4 V
Защита от перегрузки по току при зарядке 1	105 A	2000 ms	
Защита от перегрузки по току при зарядке 2	120 A	2000 ms	
Термозащита	<32 °F/0 °C или >149 °F/65 °C		

Разряд	**Характеристики**	**Задержка**	**Восстановление**
Защита от перенапряжения на элементах	2500 mV	3000 ms	3400 mV
Защита от перенапряжения на модуле	40,0 V	3000 ms	48,0 V
Защита от превышения тока разряда 1	105 A	2000 ms	
Защита от превышения тока разряда 2	120 A	2000 ms	
Защита от короткого замыкания	1200 A	400 us	
Термозащита	< -4 °F / -20 °C или > 149 °F / 65 °C		

BMS	Параметр		Условие
Защита печатно платы от перегрева	>221 °F/105 °C		
Баланс элементов	60 мВ зарядка		
Точность измерения температуры	выравнивание		
Точность измерения напряжения элементов	±3 °C		Для клеток
Точность измерения тока	+10 мВ		
Степень заряда (SOC)	±2 %		
Потребляемая мощность	Режим выключения	≤20 μA	Хранение/ транспортировка
	Режим сна	≤200 μA	Спящий режим
	Рабочий режим	≤60 mA	Зарядка/разрядка
Порты связи	RS485, CAN, RS232		
Дальность действия сигналов Bluetooth и Wi-Fi	≥49 футов/15 м		

Оптимальный диапазон рабочих температур составляет от 15 °C до 30 °C. Частое воздействие экстремальных температур может ухудшить рабочие характеристики аккумуляторной батареи и сократить срок её службы.

3.3.3 Интерфейс панели

DT-3U-48100

NO.	Пункт	Описание использования	Примечание
A	Handles	Для работы с аккумулятором, его установки и демонтажа	
B	Grounding	Используется для подключения аккумулятора к заземлениюssa	
C	Negative terminal	Используется для подключения инвертора/зарядного устройства	
D	Positive terminal	Используется для подключения инвертора/зарядного устройства	
E	125A breaker	Защита от перегрузки по току	
F	Power switch	Используется для включения/ выключения питания аккумулятора	
G	ON/OFF indicator	Указывает, включен ли аккумулятор или выключен	
H	Reset	Служит для сброса настроек системы управления батареей (BMS)	
I	ADS	Используется для настройки адреса батареи в аккумуляторной батарее	
J	RUN	Используется для индикации рабочего состояния батареи (свечение или мигание)	
K	ALM	Используется для индикации состояния сигнализации/ защиты батареи	
L	Dry contact	2 канала выходного сигнала, 1 канал входного сигнала	Контакт 1 слева
M	SOC	Используется для отображения текущего уровня заряда батареи (SOC)	
N	RS485-1	Подключение к управляющему компьютеру/инвертору	
O	CAN	Подключение к инвертору	
P	RS232	Подключение к управляющему компьютеру/инвертору	
Q	RS485 IN RS485 OUT	Для связи между аккумуляторными батареями	
R	Mounting ear	Используется для крепления к стойке	

DATOU BOSS

Version: 1.1.1

LiFePO4

51,2 В, 100 А·год, LiFePO4

АКУМУЛЯТОР 3U

ІНСТРУКЦІЯ

Експлуатація та технічне обслуговування

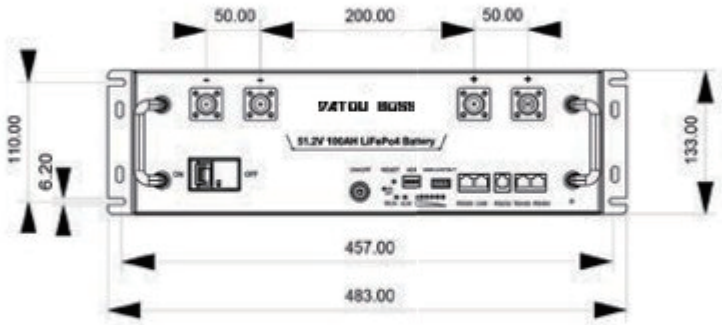
ПІДТРИМКА

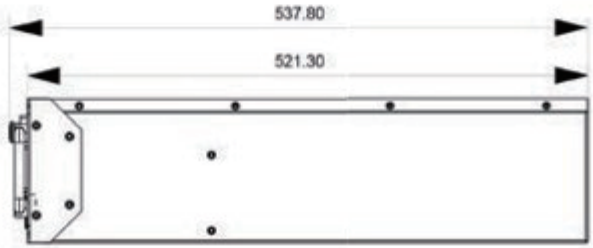
Якщо у вас виникли технічні проблеми і ви не можете знайти рішення в цьому посібнику, зверніться до компанії DATOU BOSS для отримання додаткової допомоги.

- Електронна пошта: Manager@xdatou.com
- Веб-сайт: www.xdatou.com
- Телефон/WeChat/WhatsApp/LINE: +86 137 8353 1376

3.3 Технічні характеристики

3.3.1 Габарити





3.3.2 Параметри

Параметри	DT-3U-48100
Номінальна напруга	51,2 В
Діапазон робочої напруги	40,5–54,75 В
Напруга заряджання	58,4 В
Відключення при низькій напрузі	40,0 В
Номінальна енергія	5,12 кВт·год
Корисна енергія	5,12 кВт·год
Номінальна ємність	100 А·год

Розміри	22,09 × 19,02 × 5,24 дюйма / 56,1 × 48,3 × 13,3 см	
Вага	94,8 фунтів / 43 кг	
Стандартний струм заряджання	≤50 A	
Максимальний струм заряджання	100 A	
Максимальний струм розряджання	100 A (початкова температура ≤35 °C)	
Порт зв'язку	RS485 / CAN / RS232	
Максимальна кількість паралельних підключень	15 шт.	
Робоча температура	Заряджання: 0–55 °C Розряджання: -20–55 °C	
Температура зберігання	-20–25 °C	Менше 1 року
	20–40 °C	Менше 3 місяців
	Умови навколишнього середовища під час транспортування	60 ± 25 % відносної вологості

Параметри BMS			
Заряд	**Характеристики**	**Затримка**	**Відновлення**
Захист від перенапруги на елементах	3600 mV	3000 ms	3400 mV
Захист від перенапруги на модулі	58,4 V	3000 ms	54,4 V
Захист від надмірного струму заряджання 1	105 A	2000 ms	
Захист від надмірного струму заряджання 2	120 A	2000 ms	
Термозахист	<32 °F/0 °C або >149 °F/65 °C		

Разряд	**Характеристики**	**Задержка**	**Восстановление**
Захист від перенапруги на елементах	2500 mV	3000 ms	3400 mV
Захист від перенапруги на модулі	40,0 V	3000 ms	48,0 V
Захист від надмірного струму заряджання 1	105 A	2000 ms	
Захист від надмірного струму заряджання 2	120 A	2000 ms	
Коротке замикання	1200 A	400 us	
Термозахист	-4 °F/-20 °C або >149 °F/65 °C		

BMS	Параметр		Умова
Захист друкованої плати від перегріву	>221 °F/105 °C		
Балансування елементів	Вирівнювання заряду 60 мВ		
Точність вимірювання температури	±3 °C		
Точність вимірювання напруги елементів	+10 мВ		Для мобільних пр
Точність вимірювання струму	±2 %		
SOC	5%		
Споживання енергії	Режим вимкнення	≤20 μA	Зберігання/ транспортування
	Режим сну	≤200 μA	У режимі сну
	Робочий режим	≤60 mA	Заряджання/ розряджання
Порти зв'язку	RS485, CAN, RS232		
Дальність дії сигналів Bluetooth і Wi-Fi	≥49 футів/15 м		

Оптимальний діапазон робочих температур становить від 15 °C до 30 °C. Часте перебування в умовах екстремальних температур може погіршити експлуатаційні характеристики акумуляторної батареї та скоротити термін її служби.

3.3.3 Інтерфейс панелі

DT-3U-48100

NO.	Позиції	Опис використання	Примітка
A	Handles	Для роботи з акумулятором, його монтажу та демонтажу	
B	Grounding	Використовується для підключення акумулятора до заземлення	
C	Negative terminal	Використовується для підключення інвертора/зарядного пристрою	
D	Positive terminal	Використовується для підключення інвертора/зарядного пристрою	
E	125A breaker	Захист від перевантаження по струму	
F	Power switch	Використовується для увімкнення/ вимкнення акумулятора	
G	ON/OFF indicator	Показує, увімкнений акумулятор чи вимкнений	
H	Reset	Використовується для скидання BMS	
I	ADS	Використовується для налаштування адреси акумулятора в акумуляторному блоці	
J	RUN	Використовується для індикації того, що акумулятор працює (світиться або блимає)	
K	ALM	Використовується для індикації стану тривоги/ захисту акумулятора	
L	Dry contact	2 канали вихідного сигналу, 1 канал вхідного сигналу	Контакт 1 зліва
M	SOC	Використовується для відображення рівня заряду акумулятора (SOC) у реальному часі	
N	RS485-1	Підключення до головного комп'ютера/інвертора	
O	CAN	Підключення до інвертора	
P	RS232	Підключення до головного комп'ютера/інвертора	
Q	RS485 IN RS485 OUT	Для зв'язку між акумуляторами	
R	Mounting ear	Використовується для кріплення до стійки	