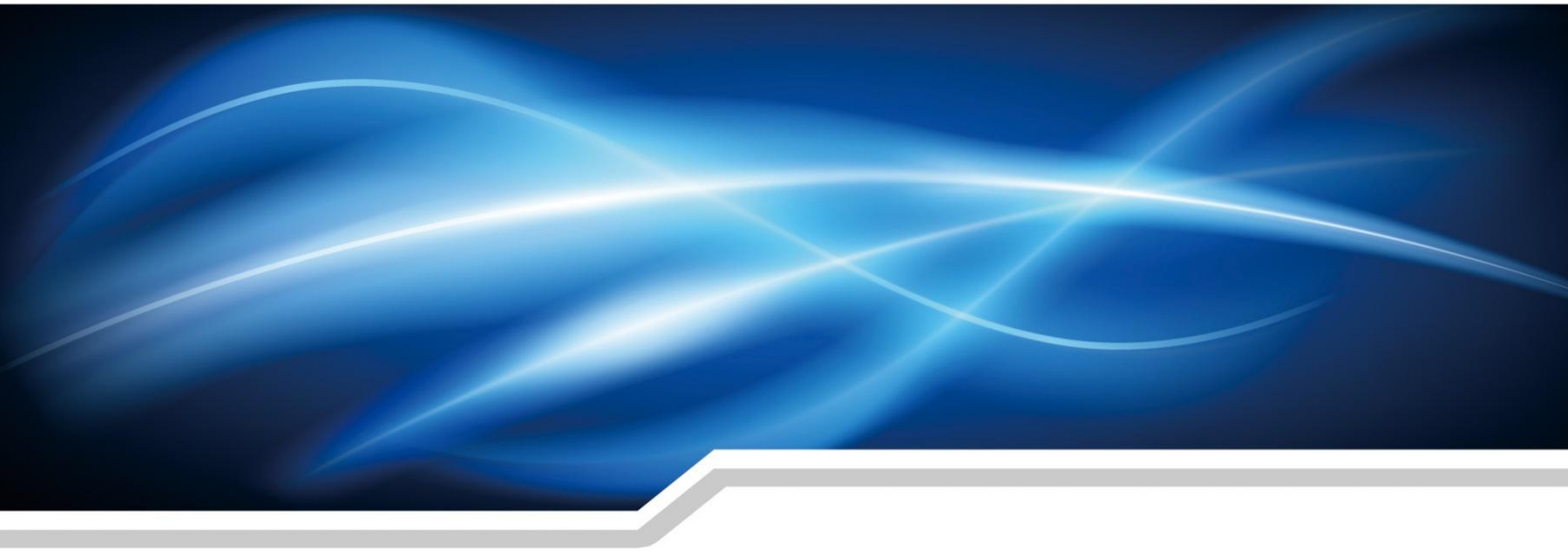
Spec No.: ZTT 22-4820

Technical specification
$LiFePO_4$
Battery module
ZTT4820(15S)



Revision	Date	Prepared	Checked	Approved	Remarks
1	24.03.2021	Sean Sun			

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1.GENERAL

This listed specification covers the general requirements, test information and performance of $LiFePO_4$ battery as manufactured by Jiangsu Zhongtian Technology Co., Ltd. (ZTT). Matters not mentioned in this technical specification shall be negotiated by purchaser & supplier. This document confirms the two Parties agreement, as technical agreement of contract unless otherwise in official written annexes.

2. DTASHEET OF THE BATTERY MODULE ZTT4820

Item		Value
Type/ModelStructure		ZTT4820 / ZTT 48V20Ah Lithium Battery / (15s)
Height 19" rack		2U (19" rack)
Rated voltage		48 V
Maximum charge voltage		54 V ± 0,2 V
Final discharge voltage		40.5 V (adjustable)
Rated capacity		20 A·h
Rated charging current		0,2C (4 A, adjustable)
Rated discharge current		0,5C (10 A, adjustable)
Maximum discharge current		1C (20 A)
Working temperature	Charge	0～+55°C
	Discharge	-20～+55°C
Permissible ambient humidity during operation		≤ 95%
BMS ports		RS232, RS485
The dimensions of the battery module case (WxDxH)		482x300x89 mm± 2 mm (2U height), 300 depth does not include handles, terminals
The color of module case		The black (***Option*** – Color can be changed)

3. PACKING, TRANSPORTATION, STORAGE AND MAINTENANCE BATTERY MODULE

3.1. Packing

The battery module must be packed in a shipping container to ensure its safety during transportation and storage.

Each package of battery modules must be accompanied by a packing list with the following information: the manufacturer's name, battery module type, the total number of modules in the lot, the packing date and the set of technical documentation

At each packing place (carton box) there must be a sticker (nameplate) indicating: the manufacturer's name, the type of battery module, the quantity in this packing place, the packing date.

Each packing box must be marked with minipulation signs:

- "Fragile. Caution";
- "Protect from moisture";
- "Top".

Standardly, each battery module is packed in a separate cardboard box. In each box, a package with accompanying documentation is placed inside or outside. When transporting long distances by rail, sea, road or air transport, a box or boxes are placed in wooden boxes or wooden pallet selected by manufacturer.

3.2. Transportation

During transport, the battery module and accessories must be packed. During transportation, any serious vibrations, shocks, rain and sunlight should be avoided. The battery module can be transported by car, train, ship, airplane, etc.

3.3. Storage

The battery module should be stored in a dry, ventilated place, every three months to do one discharge-charge cycle.

When storing the battery module, avoid any contact with corrosive materials. Keep the battery module away from fire, heat and sunlight.

When storing, it is necessary to maintain the capacity of the battery module at 40-60%

of the nominal capacity.

If the battery module is stored for a long time, recharge it with 50% of the nominal capacity. To do this: completely discharge it to an equivalent load, then charge it with a constant current of 0.2C for 3-4 hours.

3.4. Maintenance

3.4.1. If the battery module is not used for a long time at the facility, it is necessary to connect it to the charger every 3 months and charge it with 0.2C for 2 hours.

3.4.2. Do not disassemble the battery module while servicing.

3.4.3. It is forbidden to replace the cells (batteries) inside the battery module, to open the cells (accumulators) in the battery module.