

FBTech 48V series Lithium Iron Phosphate Battery is storage battery to provide reliable backup power for access network equipment, remote switch, mobile communications, transmission equipment and other systems.

Multiple storage batteries can be integrated as Battery System in parallel connections with intelligent centralized monitoring and installed in standardized cabinet. It scales up and realizes flexible and effective power solutions for telecommunication and energy storage as well.



Standard Lineup

- Nominal voltage 48V and 51.2V with optional capacity and enclosure

Features

- Built-in intelligent BMS (Battery Management System) for battery protection from overcharge, over-discharge, overcurrent and over-temperature.
- Standard 19-inch rack-mount durable enclosure for plug & play replacement
- Equipped with RS485/RS232 communication
- Built-in function for parallel connection
- Standard BMS with options for charging current limit in parallel connection (programmable ON/OFF)
- Safest lithium chemistry with high energy density
- Efficient & long-lasting service life

Custom Manufacturing

- Custom storage battery of different operating voltage, capacity etc.
- Custom production from cells selection, BMS to enclosure etc.



ES4850X / ES4850



ES48100X / ES48100

Model	ES4850X	ES4850	ES48100X	ES48100
General Characteristics				
Nominal voltage	48V	51.2V	48V	51.2V
Nominal capacity@0.2C	50Ah	50Ah	100Ah	100Ah
Min. capacity@0.2C	48.5Ah	48.5Ah	97Ah	97Ah
Nominal energy	2.4kwh	2.56kWh	4.8kWh	5.12kWh
Dimensions(W*D*H)	483*400*133mm	483*400*133mm	483*385*222mm	483*385*222mm
Approx. weight	30.3Kg	31.5Kg	49.5Kg	51.8Kg
Electrical Characteristics				
Operating voltage range	42V~54V	44.8V~57.6V	42V~53.2V	44.8V~56.8V
Recommended charging voltage	52.5V~54V	56V~57.6V	52.5V~53.2V	56V~56.8V
Max. charging current	50A	50A	50A	50A
Charging current limit in parallel connection (programmable ON/OFF)	10A	10A	10A	10A
Max. continuous discharging current	50A	50A	50A	50A
Max. peak discharging current	55A (<3S)	55A (<3S)	55A (<3S)	55A (<3S)
Discharging cut-off voltage	42V	44.8V	42V	44.8V
Faraday charging efficiency	≥98%	≥98%	≥98%	≥98%
Energy charging efficiency	≥92%	≥92%	≥92%	≥92%
Internal resistance	80mΩ	85mΩ	55mΩ	60mΩ
Self-discharge	≤3.5%	≤3.5%	≤3.5%	≤3.5%
Cycle Life (@25°C,0.2C,80%DOD)	1800 Cycles	1800 Cycles	1800 Cycles	1800 Cycles
Operating Conditions				
Operating temperature	Charge	0°C~45°C		0°C~45°C
	Discharge	-10°C~45°C		-10°C~45°C
Storage temperature	-20°C~45°C		-20°C~45°C	
Storage duration	12 Months @20°C~25°C		12 Months @20°C~25°C	
Safety standard	UL 1642 at cell level		UL 1642 at cell level	
Water dust resistance	IP30		IP30	
Parallel function	Maximum support 16 units in parallel, recommended no more than 12 units		Maximum support 16 groups in parallel, recommended no more than 12 groups	