

## U3A1-50P-A

Energy3U rack-mount battery system for telecom



### Brief Introduction

**U3A1-50P-A** standard backup battery is based on Lithium iron phosphate battery of BYD.

It has been designed to provide backup power for telecom equipment or energy storage system in household.

It has excellent safety, high energy density, long lifetime, very nice temperature performance, green power newly of excellent safety and high reliability.

### Feature

- ◆ ETSI standard 19 inch 3U rack-mount design
- ◆ Build-in battery control for efficient operation
- ◆ Comprehensive communication
- ◆ Compatible with standard telecom equipment
- ◆ Support parallel connection between batteries.

### Advantage

- ◆ More cabinet for value generating equipment
- ◆ Less weight for pole mounted sites
- ◆ No active cooling system required
- ◆ High operational reliability
- ◆ Lifetime more than 10 years at +25°C
- ◆ Optimal management
- ◆ ROHS compliance

### Application

- ◆ Telecom Basic station
- ◆ Data center
- ◆ Telecom Outdoor cupboard
- ◆ solar hybrid system
- ◆ Home energy storage system

## U3A1-50P-A

### Nominal characteristic

Nominal voltage[V]	51.2
Capacity [C/5][Ah]	50
Energy [C/5][WH]	2560

### Mechanical characteristic

Width[mm]	482.6(19")
Height[mm]	130 (3U)
Depth[mm]	440 (Without handle); 478 (With handle);
Weight[kg]	34.8 ± 0.5

### Electric characteristic

Voltage window[V]	40~57.6
Charge voltage[V]	56.5 (Float charge: 55.2, Boost charge: 56.8)
Max charge current	1C
Max. Output power[W]	2500
Recharge time[h]	0.2C*6hr (standard)

### Discharge current at the various back up times

1h	1C
2h	0.5C
4h	0.25C

### Operating conditions

Lifetime @ +25°C	>10 years
Cycle life[100%DOD,+25°C]	3500
Operating temperature	Charge :-10~50°C; Discharge:-20~55°C;
Transport regulation compliance	UN3480
Storage temperature	-20°C ~45(<3months,20%~60%SOC); -20°C~30(<1 year,30%~60%SOC);
EMC standard compliance	EN 61000 chapter 4.2,4.3,4.5,4.6/EN55022
Certificate	TUV SUD/CE/ UL1642/UN38.3
Protection class	IP20
Maintenance	Charge the battery half a year when in storage

# 3U Series backup battery

## Battery management System function

- ◆ Current detect at charging and discharging
- ◆ Hardware protection
- ◆ Discharge control
- ◆ Charge control
- ◆ Cell balance
- ◆ Reverse protection
- ◆ Cell voltage detect
- ◆ Temperature detect
- ◆ Communication(RS485)
- ◆ Operating state display of system (LED)
- ◆ PACK voltage detect
- ◆ Fault alarm

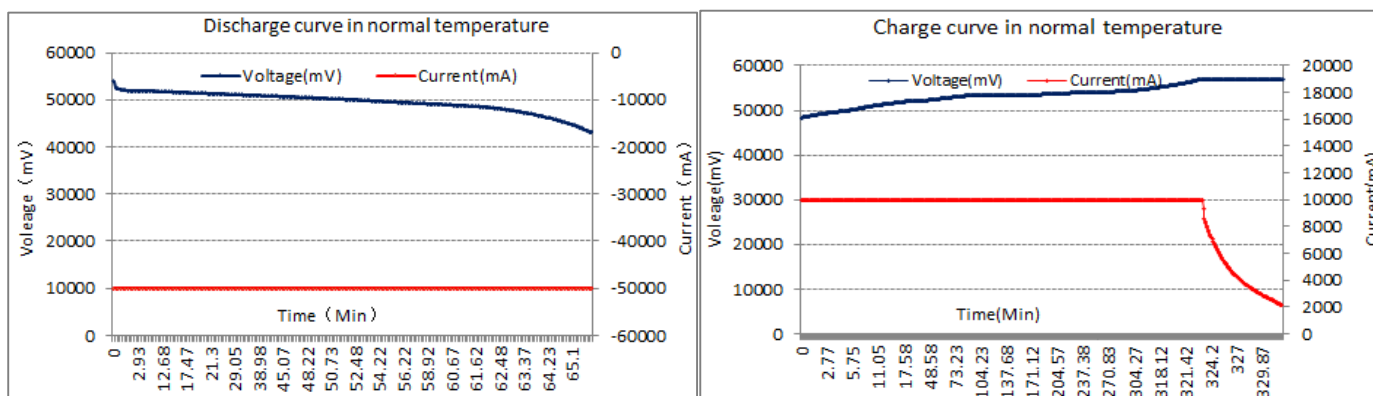
## Communication

- ◆ Communication interface(RS485), battery operating state (current、voltage、temperature etc.)

## Industrial vision

- ◆ U3A1-50P-A battery has been developed and qualified to suit the demanding requirements of performance and operational reliability of our customers
- ◆ Cell manufacturing is carried out on established industrial production lines
- ◆ Manufacturing plants comply with the legislation in force in each country and with international quality standards (ISO9001 QS9000)

### [Charge & Discharge curve]:



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