

# RACK TYPE Battery



*The first indigenous produced lithium battery for the telecommunications industry*



*The new generation lithium batteries developed by ASPILSAN Energy, directly for the telecommunication sector were produced with longer life, high performance and lighter weight.*

## General features

- 100Ah Telecommunication battery is produced from cells operating under Lithium-Iron Phosphate (LiFePO<sub>4</sub>) chemistry. The battery is designed to work in harmony with the Telecommunication sector, UPS and Energy Storage Systems. In addition to providing a long cycle life, the battery allows discharge current up to 1C current levels. With the help of the heaters inside, it allows charging in conditions below 0°C. The battery has an internal current limiting feature. In case it is tried to be charged with a current above the maximum charging current, the battery continues to charge without being protected by limiting the charging current.

## Charging Method (CCCV)

- Charge voltage 54.75V
- Maximum continuous charging current 50A
- In order not to damage the cells in the battery, when the charging current exceeds 50A, the current is limited by the BMS and charging is continued at 10A.
- Operating temperature range when charging is -5°C ~ 55°C.

## Cycle Life

- After 3500 cycles at 80%DoD under 0.5C Load; Capacity ≥ 80%

## BMS Functions

- After 3500 cycles at 80%DoD under 0.5C Load; Capacity ≥ 80%
- Low Temperature Protection in Discharge/Charge,
- High Temperature Protection in Discharge/Charge,
- Short Circuit Protection Etc.

## Field of application

- It can be used in all areas that need batteries in the telecommunication, UPS and energy storage sectors.
- It can be used for all systems requiring high capacity.
- Base stations, Energy Storage Systems and Solar Systems



**ASPILSAN Enerji A.Ş.**

is a Turkish Armed Forces Foundation company.

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## RACK TYPE Battery

In Communication Technologies  
Significant Contribution to National  
and Indigenous Production



Features	Parameters
Nominal Voltage	48V
Nominal Capacity	(0.5C Charge, 0.2C Discharge @25°C) 100Ah
Operating Voltage Range	40V-54.75V
Charge Voltage	54.75V
Maximum Continuous Charge Current	50A
Modular Current (Limited Charge Current)	10A
Discharge Cut-off Voltage	40V
Maximum Continuous Discharge Current	100A (1C)
Operating Temperature Range	Discharge: -20°C to +60°C Charge: -20°C to +55°C (With built-in heater) Charge: 0°C to +55°C (Without built-in heater)
Cycle Life	At 0.5C Load at 80% DoD after 3500 cycles, Capacity ≥ 80%
<b>Functional Features</b>	
Internal Heater	Yes
BMS Protection Functions	Low/High Cell Voltage Protection, Discharge/Charge Over Current Protection, Discharge/Low Temperature Protection, Discharge/Charge High Temperature Protection, Short Circuit Protection, Etc.
Communication Protocol	MODBus (RTU) - RS485
Parallel Connecting	6 batteries can be connected in parallel.
LED Indicators	ALM / RUN / SOC
<b>Mechanical Properties</b>	
Dimensions	Width: 444mm , Depth:395mm , Height: 175mm
Weight	47 ±2 kg
Terminal	M6 (Tightening Torque Value: 4N.m)
Installation Method	Rack and Lamposed Type
Connection Interface	M6 Lug, (with a minimum 16mm <sup>2</sup> cable)

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