

TELECOMMUNICATION 48V 100 AH Battery

aspilsan
Energy of Technology

*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 (LiFePO4) 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 2000 cycles at 80%DoD under 0.5C Load; Capacity 80%

BMS Functions

- After 2000 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.



ASPILSAN Enerji Sanayi ve Ticaret A.Ş.
Turkish Armed Forces Foundation company.

aspilsan.com



TELECOMMUNICATION 48V 100 AH Battery

In Communication Technologies
Significant Contribution to National
and Indigenous Production



Features

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~+60°C Charge: -5°C~55°C
Cycle Life	At 0.5C Load at 80%DoD after 2000 cycles, Capacity ≥ 80%

Functional Features

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

Mechanical Properties

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 ² cable)

ASPILSAN Enerji A.Ş.
Battery Systems Production Facility
Mimarsinan OSB Mahallesi
1. Cadde No:43 Kayseri / Turkey
Tel: +90352 321 12 15-16
Faks: +90352 321 12 17

ASPILSAN Enerji A.Ş.
R&D Center & HDRS Batteries Production Facility
Organize Sanayi Bölgesi
12. Cadde No: 8 Kayseri / Turkey
Tel: +90352 321 12 15-16
Faks: +90352 321 12 17



aspilsan.com