

Introduction

OPG48050 (LFP Battery) is high-tech product, which is developed independently by OKAYA POWER LTD. It has outstanding advantages in power backing-up area for telecom ,ATM's or UPS specified area, which is widely used in access network equipment, remote switching office, mobile telecom equipment, transmission equipment, satellite ground stations and microwave telecom equipment.

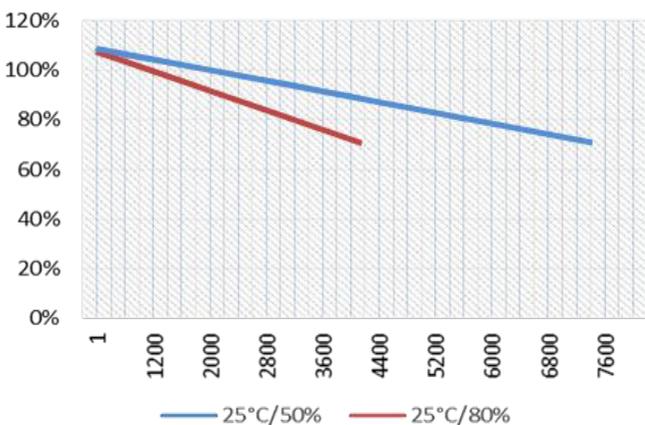
Mechanical Structure

- Designed as 19 inches standard rack mountable.
- Multiple modules can be paralleled.
- Anderson Connector for Power Output

Advantages of Lithium Battery

- Small in volume and light in weight, reduce 40-50% in size (compared with VRLA Battery).
- More then 12 years of lifetime @ I or II class power supply area, +25°C, and managed by BMS.
- At +25°C, 80% DOD, the cycle life is more than 4000 cycles.
- Excellent high temperature performance, and air condition is unnecessary when the ambient temperature is less than +38°C @ I or II class power supply area, which can save energy.
- Non-pollution, safe and reliable.

Lithium Battery Life Cycle @25° C



BMS

- Battery system adopts advanced BMS, having warning and protection function of over-discharging, over-charging, over-current, temperature and etc.
- Optimization and management to the battery charging and discharging.
- Communication interface with controller.
- Compatible with existing high frequency switching power supply system.

Production Status

- Mass production capacity for different capacity (3ah-100Ah) and full range of battery pack (as per customer requirement)
- ISO9001, ISO14001, OHSAS18001

Applications

- Its small size and light weight make it suitable for powering of variety of telecom equipment's.
- These Li-ion Batteries are best suitable for outdoor applications.

OPG48050AH (Li-ion Battery 19" Rack Type)

Model	OPG48050AH
Type	48V/50Ah
Rated Voltage[V]	48V
Capacity [C/5][Ah]	50Ah
Mechanical Characteristics	
Module dimension[mm]	482*480*89 (2U) (WXDXH)
Module Weight [kg] Approx.	50Kg
Cell Voltage [V]	3.2V
Cell compound mode	15S1P
Electrical Characteristics	
Voltage Range [V]	-42V~ 55.5V \pm 0.2V
Charging Voltage [V]	-54V \pm 0.2V
Charging Mode	CC/CV
Ah Efficiency	>95%
Max. Charge Current [A]	50A
Max. Discharge current [A]	50A
Life @ 35°C, Class I&II area	10years
Cycle Life[80%DOD, 25°C,@0.5C Charge and 0.5C discharge]	>4000 Cycles
Working Condition	
Working Temperature	Charging: 0°C—+55°C Discharging: -10°C—+65°C
Storage Temperature and Time	1year @ 20°C, 6months @ 30°C, 3months @ 40°C
Safety Certificate	CE, UL, IEC
Protection Class	IP20