

**Brief Introduction**

OPG48V (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 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.

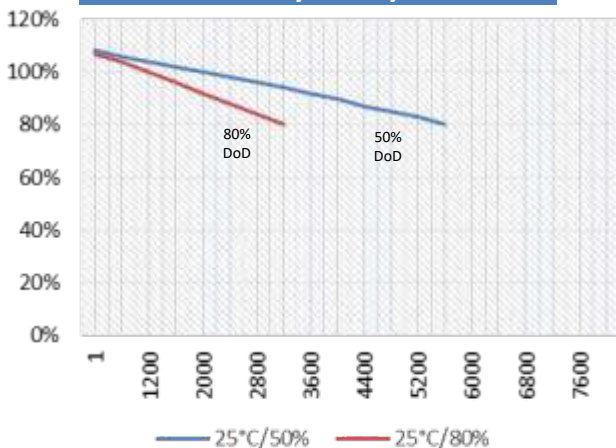
**Mechanical Structure**

- 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 than 10 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 3000 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**



- 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.
- Integrals with by RS-485 Remote monitoring to the system running Status by GPRS.

**Production Status**

- Mass production capacity for different capacity (3ah-100ah) and full range of battery pack (as per customer requirement)
- ISO9001, ISO14001, OHSAS18001 and TSI6949
- ROHS

**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.

## DATA SHEET

Model	OPG48020	OPG48030	OPG48040	OPG48050	OPG48080	OPG48100
Type	48V/20Ah	48V/30Ah	48V/40Ah	48V/50Ah	48V/80Ah	48V/100Ah
Rated Voltage[V]	48V	48V	48V	48V	48V	48V
Capacity [C/5][Ah]	20Ah	30Ah	40Ah	50Ah	80Ah	100Ah
<b>Mechanical Characteristics</b>						
Module dimension[mm]	482*300*89(2U) (WXDXH)	482*300*89(2U) (WXDXH)	482*350*89(2U) (WXDXH)	482*350*89(2U) (WXDXH)	482*400*178(4U) (WXDXH)	482*480*178(4U) (WXDXH)
Module Weight [kg]	15Kg	15Kg	20KG	28KG	40KG	50KG
Cell Voltage [V]	3.2V	3.2V	3.2V	3.2V	3.2V	3.2V
Cell compound mode	15S4P	15S5P	15S7P	15S1P	15S1P	15S1P
<b>Electrical Characteristics</b>						
Voltage Range [V]	-42V~ -54V ±0.2V	-42V~ -54V ±0.2V	-42V~ -54V ±0.2V	-42V~ -54V ±0.2V	-42V~ -54V ±0.2V	-42V~ -54V ±0.2V
Charging Voltage [V]	-48V±0.2V	-48V±0.2V	-48V±0.2V	-48V±0.2V	-48V±0.2V	-48V±0.2V
Charging Mode	CC/CV	CC/CV	CC/CV	CC/CV	CC/CV	CC/CV
Max. Charge Current [A]	15A	30A	40A	50A	80A	100A
Max. Discharge current [A]	15A	30A	40A	50A	80A	100A
	10years	10years	10years	10years	10years	10years
Cycle Life[80%DOD, 25°C, @0.5C Charge and 1C discharge]	>3000 Cycles	>3000 Cycles	>3000 Cycles	>3000 Cycles	>3000 Cycles	>3000 Cycles
<b>Working Condition</b>						
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					
Protection Class	IP20					