

# LEOCH PU409V50(409.6V50Ah)

PU409V50



## LEOCH Provides Safe and Efficient LFP Battery Solutions.

LEOCH PU series adopt high safety LFP cell, with intelligent BMS management system independently developed by LEOCH, safe and reliable, excellent performance, stability and reliability, suitable for three-phase UPS backup system.

### Features

- Safest lithium battery technology
- Eco-friendly
- 20 Years Designed service life
- Can/RS485 Communication output for monitoring
- Achieve up 32 BMU in cascade communication
- Internal cell balancing, Passive equalization, the maximum equalization current up to 300 mA
- High-precision cell voltage and temperature acquisition:  $\pm 3$  mV,  $\pm 1^\circ\text{C}$
- Fan control circuit and interface, realize heat dissipation inside the module

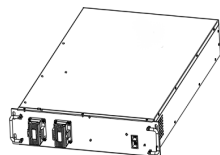
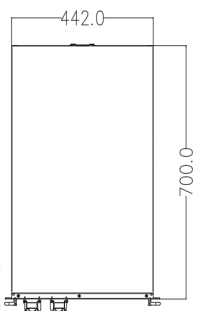
### PACK Style



### Performance data

Time(min)	10	15	20	30	60
Constant Power(kw)	91.2	80	55.8	40.32	20.36
Constant Current(A)	245	200	150	100	50

### Size



### System specifications

Case Material	SPCC
Cell Type	Prismatic LiFePO <sub>4</sub>
Terminal Type	M8
IP Grade	IP21

### Basic performance

Nominal Voltage	409.6V
Nominal Capacity	50Ah
Energy	20.48KWh
Self Discharge	$\leq 2\%$ /Month
Cell Capacity	50Ah
Cycle Life	2500 times(1C/1C)
Size	1000*600*1500mm
Weight	420 Kg

### Charge performance

Rated Charge Current	25A
Maximum Charge Current	50A
Rated Charge Voltage	435.2-441.6V
Balancing Voltage	$> 435.2$ V

### Discharge performance

Max Output Power	91.2KW
Standard Discharge Time	80KW@15min
Rated Discharge Cut-off Voltage	358.4V
Minimum Discharge Cut-off Voltage	339.2V
Short Circuit Current	Approx.4000A

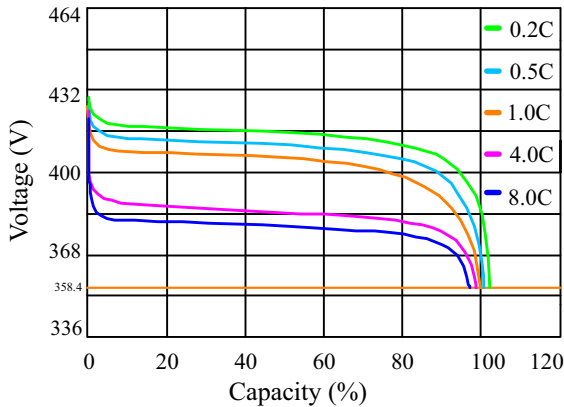
### Temperature and humidity

Discharge Temperature	-20-65°C
Charge Temperature	0-45°C
Storage Temperature	-5-35°C
Transportation Temperature	-20-65°C
Operating Humidity	$\leq 95\%$ R.H

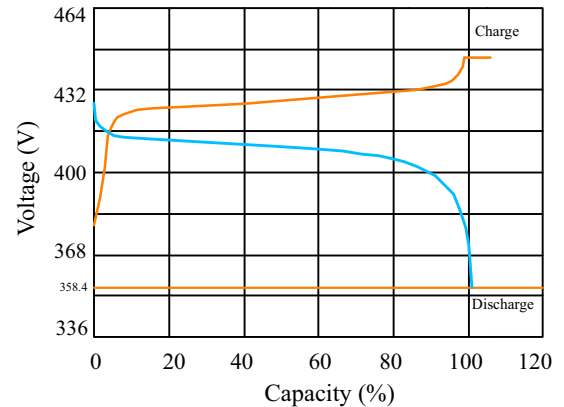
### Other

Communication	CAN/RS485/LAN
Dry Contact	Yes
System Parallels	$\leq 15$
Screen	Optional
Thermal Management	Air Cooling

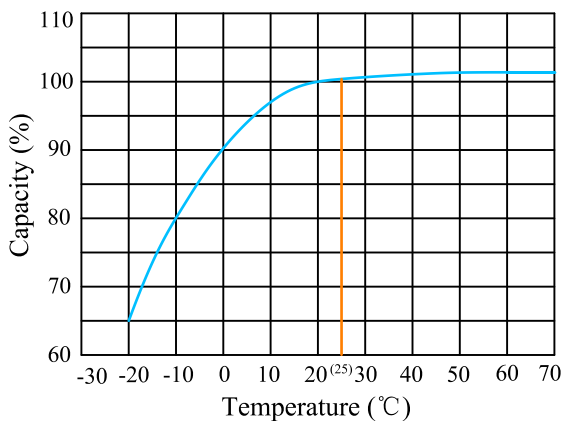
## Discharge Performance at 25°C



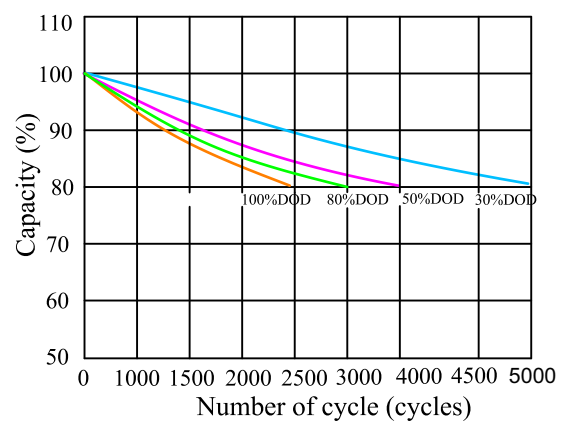
## Charge and Discharge at 25°C, 0.5C



## Temperature effects on capacity at 1C

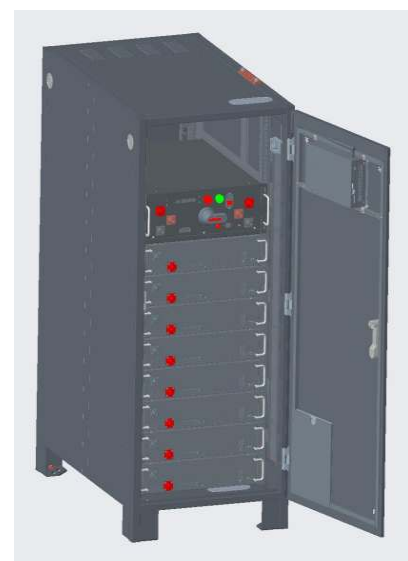


## Cycle life with DOD at 25°C, 1C/1C



## Cautions

1. Do NOT short circuit, crush or disassemble
2. Do NOT heat or incinerate.
3. Do NOT immerse in any liquid.
4. Store at 50% capacity. Recharge every 6 months. The storage area should be clean, cool, dry and ventilated.
5. Disconnect charging source prior to connecting or disconnecting battery terminals.
6. Do NOT dispose of batteries in a fire as they can explode.
7. Do NOT open, alter, or mutilate batteries. Released electrolyte is harmful to skin and eyes. It may be toxic.
8. Do NOT mix different types and brands of lithium-ion batteries.
9. Do NOT dispose in trash, follow local regulations and manufacturer's instruction.
10. See installation instructions before connecting to the supply.
11. The battery cabinet receives power from more than one source. Disconnection of all DC sources is required to De-energize this unit before installing or servicing. Wait 5 minutes before opening the unit.
12. Do NOT install on or over combustible surfaces
13. Refer to manual before servicing
14. Do NOT touch bare terminals.



Rack PU409V50(S)  
PU409V50–without HMI, PU409V50(S)-with HMI