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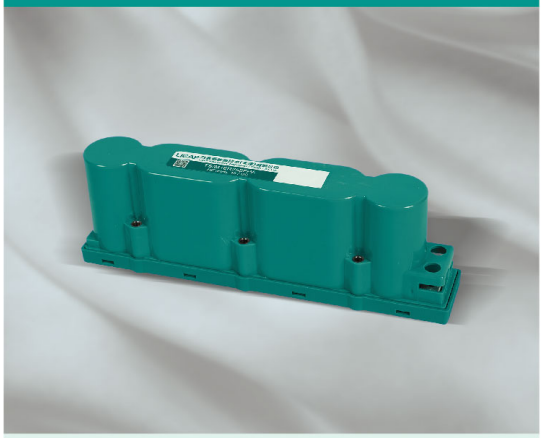

APPLICATIONS

- New Energy Vehicle
- Engineering Machinery
- Electrical Power System
- Industrial Equipment

FEATURES AND ADVANTAGES

- One Million Cycles Lifetime
- High Power Density
- Wide Range of Operation Temperature

Electrical Performance		
Capacity	Rated Capacity	58F
	Capacity Tolerance	0/+20%
Voltage	Rated voltage	16V DC
	Surge Voltage	17V DC
Internal resistance	ESR(initial)	22mΩ
Electric current	Maximum leakage current	25mA (25℃ , after 72h)
	Maximum continuous current	19A
Energy	Maximum peak current	200A
	Stored energy E_{stored}	2.1Wh
Power density	Energy density E_{max}	3.2wh/kg
	Power density P_{max}	4588W/kg
Temperature Features		
Temperature features	Operating Temperature Range	-40 ~ +65℃
	Storage Temperature Range	-40 ~ +70℃
Monitor and Control		
Alarm Monitor	Over voltage alarm	N/A
	Temperature monitor	N/A
Service Lifetime		
Lifetime Under Normal Temperature	Operated over 10 years under 25℃ at rated voltage	
	Change in capacity	≤20%
	Change in internal resistance	≤100%
Lifetime Under High Temperature	After operated for 1500h under 65℃ at rated voltage	
	Change in capacity	≤20%
	Change in internal resistance	≤100%
Storage Lifetime	4 years (under the highest storage temperature, uncharged)	
Cycling Test	1 million cycles between rated voltage and half rated voltage at 25°C with constant current	
	Change in capacity	≤20%
	Change in internal resistance	≤100%
Safety Specification and Mechanical Features		
Safety	Insulation resistance	500V DCInsulation resistance ≥100MΩ
	Insulation intensity	5600V DCLeakage current ≤10mA
	Protection level	IP54
Mechanical Vibration	Operation vibration	GB/T 11287-2000
	Transportation vibration	GB/T 4798.2-2008
	Impact	GB/T 14537-1993

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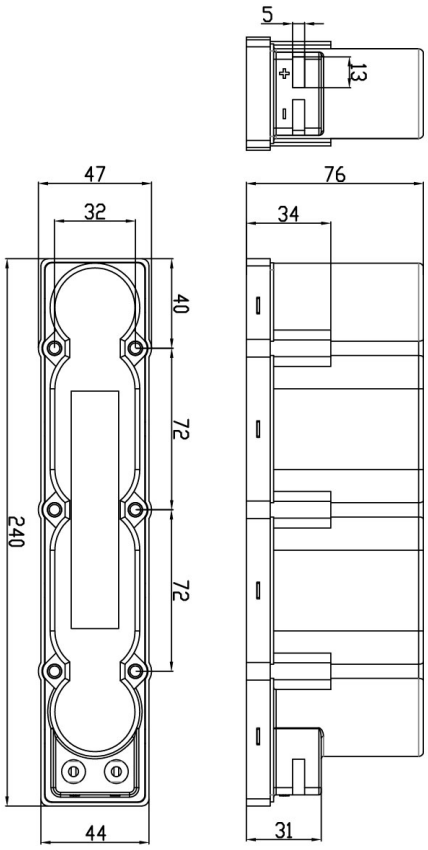
Outline Drawing(For Reference)



External Dimension		
Weight	Unit: kg	≤0.65
Size	Unit: mm	240*47*76 (L*W*H)
Shell	Plastic shell	

Module Fastener (For Reference Only)

Positon	Name	Specification	Material	Quantity	Torque
Module installation	Screw bolt	M4×40	Stainless steel 10.9 level	6	3N*m
	Flat gasket	Φ4		6	
	Spring gasket	Φ4		6	
	Nut	M4		6	
Module Output Terminal Installation	Screw bolt	M5×10		2	6N*m
	Flat gasket	Φ5		2	

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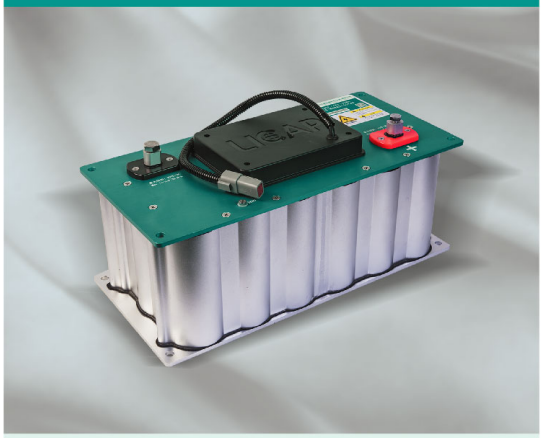

APPLICATIONS

- New Energy Vehicle
- Engineering Machinery
- Rail transit
- UPS and Telecom Systems
- Industrial Equipment

FEATURES AND ADVANTAGES

- One Million Cycles Lifetime
- High Power Density
- Active Voltage Equilibrium
- Wide Range of Operation Temperature
- Temperature and Voltage Control

Electrical Performance		
Capacity	Rated Capacity	165F
	Capacity Tolerance	0/+20%
Voltage	Rated voltage	48V DC
	Surge Voltage	51V DC
Internal resistance	ESR(initial)	6mΩ
Electric current	Maximum leakage current	6mA (25℃ , after 72h)
	Maximum continuous current	150A
Energy	Maximum peak current	2000A
	Stored energy E_{stored}	52.8Wh
Power density	Energy density E_{max}	3.7wh/Kg
	Power density P_{max}	6760W/Kg
Temperature Features		
Temperature features	Operating Temperature Range	-40 ~ +65℃
	Storage Temperature Range	-40 ~ +70℃
Monitor and Control		
Alarm Monitor	Over voltage alarm	The voltage of single module≥2.7V
	Temperature monitor	NTC10K
Service Lifetime		
Lifetime Under Normal Temperature	Operated over 10 years under 25℃ at rated voltage	
	Change in capacity	≤20%
	Change in internal resistance	≤100%
Lifetime Under High Temperature	After operated for 1500h under 65℃ at rated voltage	
	Change in capacity	≤20%
	Change in internal resistance	≤100%
Storage Lifetime	4 years (under the highest storage temperature, uncharged)	
Cycling Test	1 million cycles between rated voltage and half rated voltage at 25°C with constant current	
	Change in capacity	≤20%
	Change in internal resistance	≤100%
Safety Specification and Mechanical Features		
Safety	Insulation resistance	500V DCInsulation resistance ≥100MΩ
	Insulation intensity	2500V DCLeakage current ≤10mA
	Protection level	IP65
Mechanical Vibration	Operation vibration	GB/T 11287-2000
	Transportation vibration	GB/T 4798.2-2008
	Impact	GB/T 14537-1993

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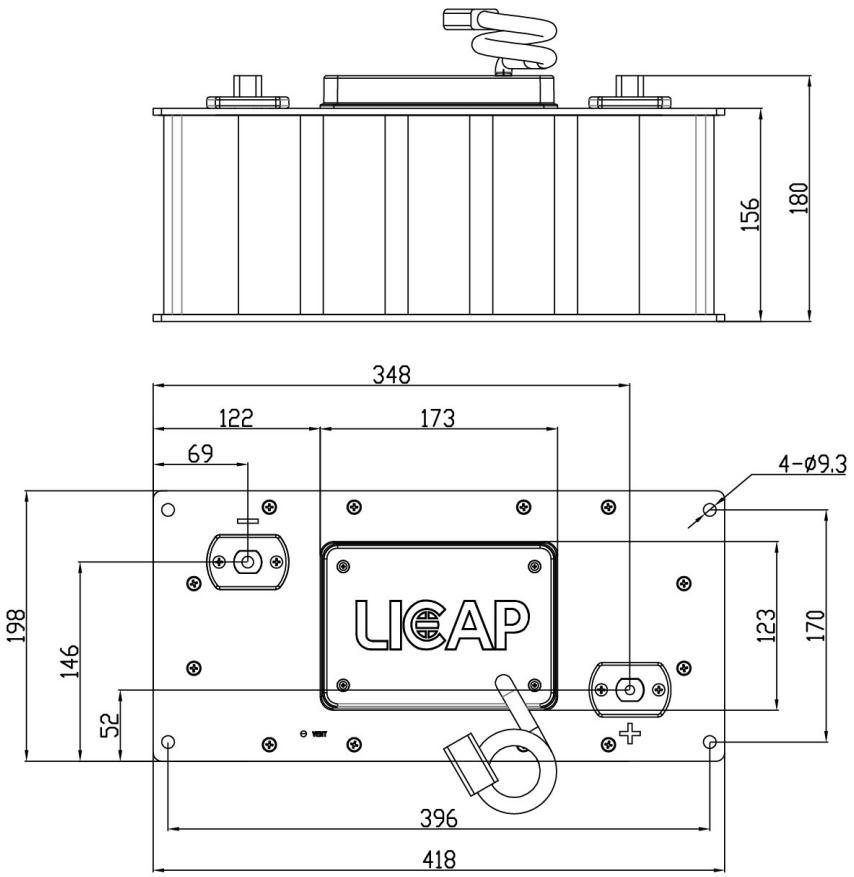
Outline Drawing(For Reference)



External Dimension		
Weight	Unit: kg	≤14.2
Size	Unit: mm	418*198*180 (L*W*H)
Shell	Aluminum	

Module Fastener (For Reference Only)

Positon	Name	Specification	Material	Quantity	Torque
Module installation	Screw bolt	M8×30	Stainless steel 10.9 level	4	20N*m
	Flat gasket	Φ8		4	
	Spring gasket	Φ8		4	
	Nut	M8		4	
Module Output Terminal Installation	Screw bolt	M8×12		1	
	Flat gasket	Φ8		1	
	Spring gasket	Φ8		1	
	Screw bolt	M10×12		1	
	Flat gasket	Φ10		1	30N*m
	Spring gasket	Φ10		1	