

# SAJ Series

## SAJ12-42 12V42Ah

SAJ series battery uses AGM and gel mixed technology. It has good cycle life and large current discharge performance. It is a cost effective product and can be widely used in different photovoltaic, lighting, power supply and control systems..



### Benefits

- Long life according to EUROBAT Classification
- Special AGM separator, adding gel electrolyte, long shallow cycle life.
- Maximum charge efficiency
- High gas recombination efficiency
- Low self-discharge rate
- Horizontal or Vertical installization
- Easy installation and handling

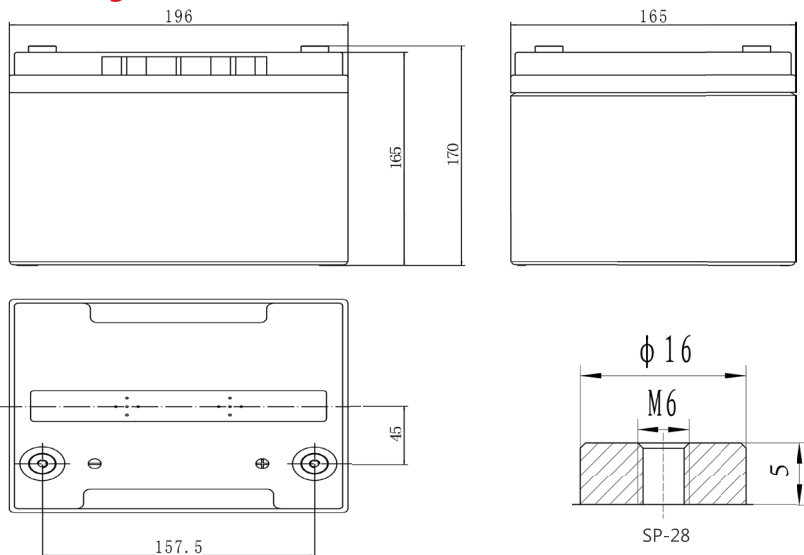
### Applications

- Solar (Wind) energy system
- Solar communication/station
- Mobile storage system

### Standards

- IEC 60896-21/22
- DIN 43539-T5
- EUROBAT guide

### Drawing



### Specifications

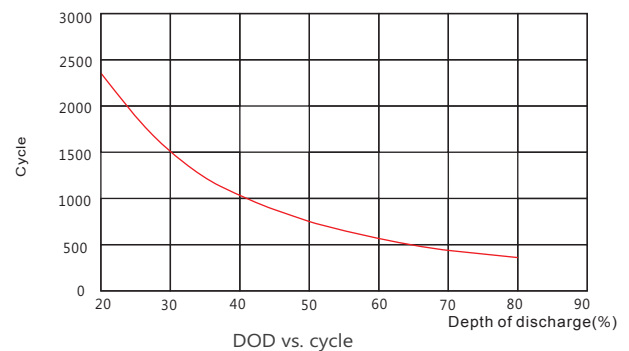
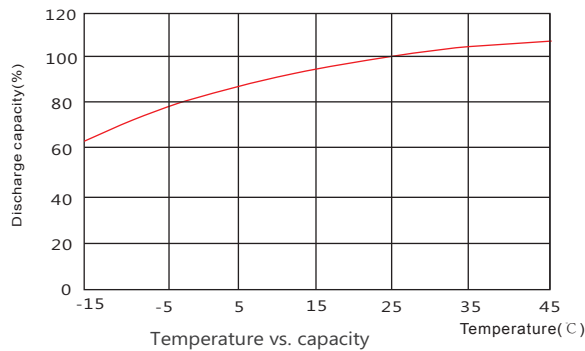
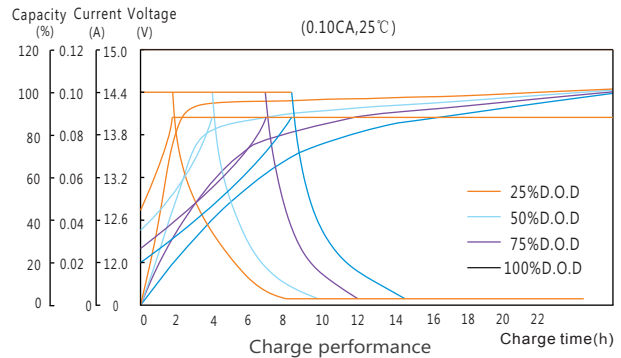
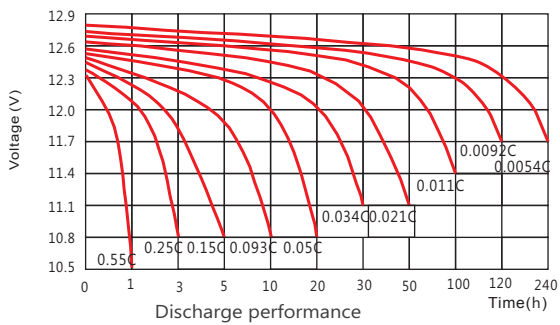
Battery Model	SAJ12-42			
Design Life (years, 25°C)	10			
Capacity (Ah, 25°C)	20HR (2.1A, 1.80V)	10HR (3.906A, 1.80V)	5HR (7.077A, 1.80V)	1HR (122.05A, 1.75V)
	42	39.06	35.385	22.05
Dimensions (mm)	Length	Width	Height	Total Height
	196	165	165	170
Approx. Weight (kg)	12.9			
Reference Internal Resistance (mΩ)	8.6 ( fully charged @ 25°C)			
Maximum Discharge Current (A/5 Sec.)	504			
Self-Discharge (25°C)	≤ 1.5% per months			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.40(-3.5mV/°C/cell), max charge current: 8.4A		2.27(-3.5mV/°C/cell)	
Short Circuit Current (A)	1400			

## Discharge Data

Constant Current Discharge Data (25°C, A)									
End Voltage (V/cell)	h								
	1	3	5	10	20	50	100	120	240
1.70	23.39	10.84	7.434	4.095	2.218	0.932	0.487	0.412	0.218
1.75	22.76	10.63	7.287	4.011	2.163	0.916	0.479	0.406	0.214
1.80	22.05	10.29	7.077	3.906	2.100	0.895	0.470	0.399	0.210
1.85	21.21	9.912	6.825	3.801	2.058	0.869	0.458	0.389	0.206
1.90	20.16	9.450	6.531	3.654	1.995	0.840	0.445	0.378	0.202

Constant Power Discharge Data (25°C, W/cell)									
End Voltage (V/cell)	h								
	1	3	5	10	20	50	100	120	240
1.70	41.65	19.32	12.98	8.328	4.303	1.749	0.932	0.814	0.439
1.75	40.41	19.07	12.87	8.282	4.295	1.746	0.929	0.813	0.439
1.80	39.18	18.65	12.73	8.19	4.252	1.733	0.929	0.812	0.438
1.85	38.01	18.06	12.30	7.887	4.123	1.691	0.906	0.791	0.428
1.90	36.84	17.05	11.50	7.354	3.840	1.575	0.855	0.750	0.403

## Performance Curve



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