

# SP Series

## SP12-42 12V42Ah

SP series VRLA battery uses AGM technology and high-purity raw materials. Its good floating back up and large current discharge performance makes it optimal and economical choice for UPS/EPS.

### Benefits

- Long life according to EUROBAT Classification
- Maximum charge efficiency
- High gas recombination efficiency
- Low self-discharge rate
- Easy installation and handling
- Vertical installation

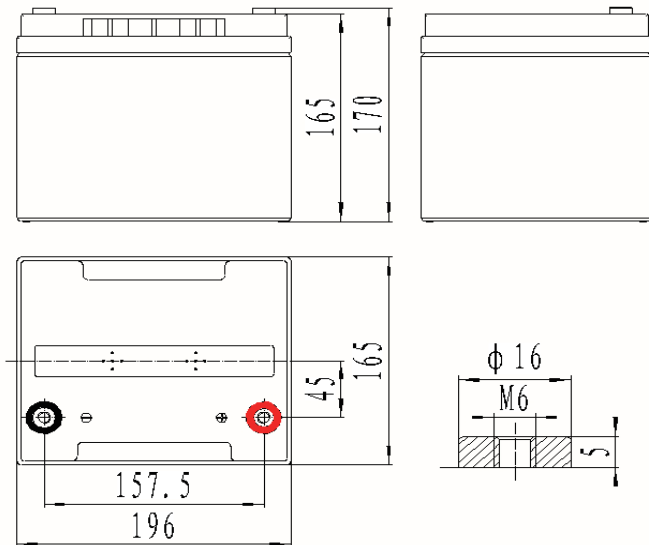
### Applications

- UPS units
- Emergency power
- Starting generators
- EPS units

### Standards

- IEC 61056-1/2
- JIS C8702-1/2
- EUROBAT guide

### Drawing



### Specifications

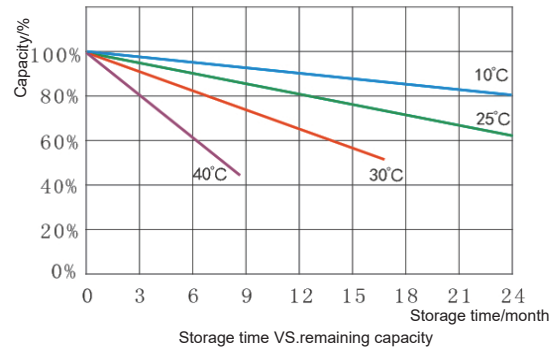
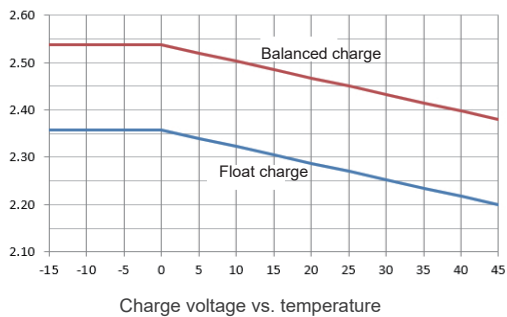
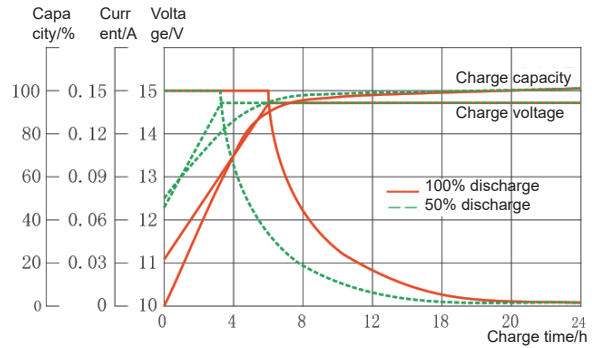
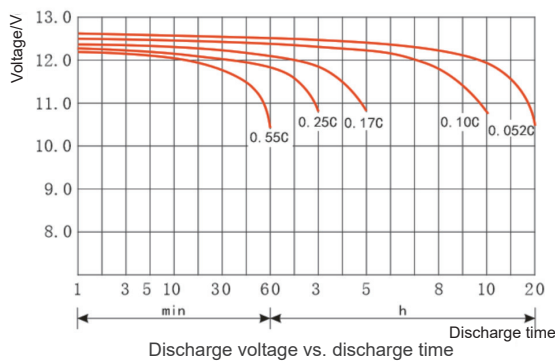
Battery Model	SP12-42			
Design Life (years, 25°C)	10			
Capacity (Ah, 25°C)	20HR (2.12A, 1.80V)	10HR (4.20A, 1.80V)	5HR (7.14A, 1.75V)	1HR(24.4A, 1.70V)
	42.4	42	35.7	24.4
Dimensions (mm)	Length	Width	Height	Total Height
	196	165	165	170
Approx. Weight (kg)	12.8			
Reference Internal Resistance (mΩ)	8.5±15%( full charged @ 25°C,testing device:HIOKIBT3562)			
Maximum Discharge Current (A/3 Sec.)	630			
Self-Discharge (25°C)	≤ 2 % per month			
Charge Voltage (V/cell, 25°C)	Cycle use		Float use	
	2.40 (-3.5mV/°C/cell), max charge current:12.6A		2.27 (-3.5mV/°C/cell)	
Short Circuit Current (A)	1400(for reference only)			

## Discharge Data

Constant Current Discharge Data (25°C, A)												
End Voltage (V/cell)	min					h						
	10	15	20	30	45	1	1.5	2	3	5	10	20
1.60	87.8	73.2	57.4	44.8	33.3	26.4	20.3	16.5	12.0	7.36	4.53	2.34
1.65	84.0	70.0	54.7	42.7	31.8	25.4	19.5	15.8	11.6	7.28	4.45	2.28
1.67	82.4	68.7	53.7	42.0	31.3	24.9	19.2	15.6	11.5	7.24	4.42	2.26
1.70	80.8	67.3	52.6	41.3	30.8	24.4	18.8	15.3	11.3	7.20	4.38	2.23
1.75	77.5	64.6	50.4	39.6	29.3	23.1	17.8	14.7	10.8	7.14	4.30	2.18
1.80	74.2	61.8	48.6	38.2	27.8	21.8	17.0	14.0	10.5	6.96	4.20	2.12

Constant Power Discharge Data (25°C, W/cell)												
End Voltage (V/cell)	min					h						
	10	15	20	30	45	1	1.5	2	3	5	10	20
1.60	173	144	118	93.0	73.3	52.6	43.0	34.2	23.3	16.8	9.04	4.75
1.65	166	138	113	90.8	70.8	51.0	42.5	33.6	22.8	16.4	8.88	4.65
1.67	164	136	110	89.0	69.1	49.6	41.8	33.2	22.6	16.2	8.83	4.61
1.70	162	135	108	87.2	67.3	49.2	41.0	32.8	22.4	16.0	8.78	4.56
1.75	156	130	105	83.8	65.0	46.7	40.5	32.2	22.0	15.7	8.65	4.48
1.80	150	126	100	80.0	62.3	44.3	39.0	31.6	21.7	15.4	8.45	4.38

## Performance Curve



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