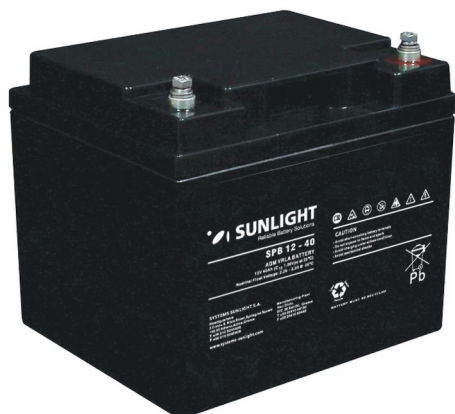


# SPB 12V - 40Ah | VRLA Battery



## Applications

- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system

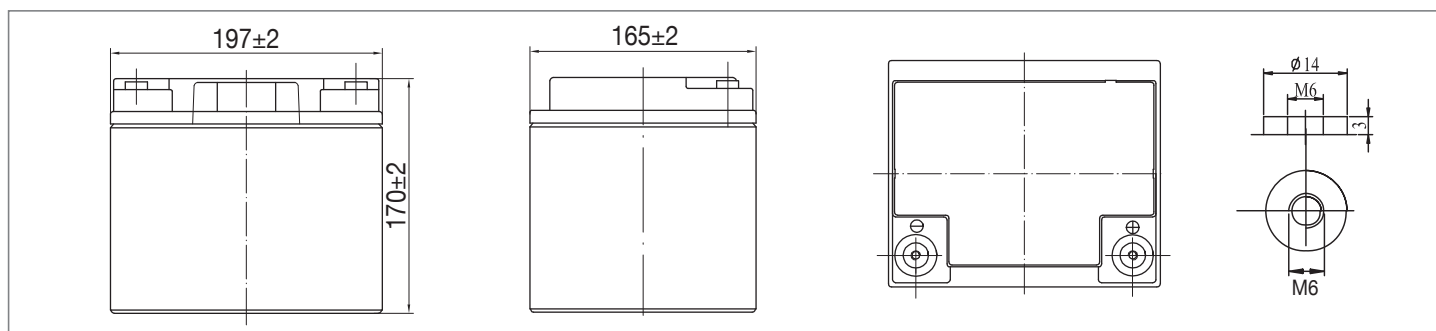
## Specifications

Nominal Voltage	12 V	
Number of cells	6	
Design Life	12 years	
Dimensions	Length	197 mm
	Width	165 mm
	Height	170 mm
	Total Height	170 mm
Approx. Weight	13.5 kg	
Nominal Capacity (25°C)	20 hours rate (2.1 A, 10.8 V)	42.0 Ah
	10 hours rate (4.0 A, 10.8 V)	40.0 Ah
	5 hours rate (7.0 A, 10.5 V)	35.0 Ah
	1 hour rate (23.8 A, 10.2 V)	23.8 Ah
Max. Discharge Current (25°C)	400 A (5s)	
Internal Resistance	8.5 mOhms	
Fully Charged battery (25°C)	3% of capacity declined per month at 25°C (average)	
Self-Discharge	Discharge	-15°C~50°C
	Charge	-10°C~50°C
	Storage	-20°C~50°C
Operating Temperature Range	1400 A	
Short Circuit Current	Boost charging voltage 2.40-2.45 Vpc	
Charging Characteristics (25°C)	Maximum charging current	12 A
	Temperature compensation	-30 mV/°C
	Float charging voltage	2.25-2.30 Vpc
	Temperature compensation	-18 mV/°C

## Battery Construction

Component	Positive Plate	Negative Plate	Container	Cover	Safety Valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

## Dimensions



## Constant Current Discharge (Amperes) at 25°C

End Voltage (Volts/Cell)	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60 V	81.5	64.7	39.2	24.8	14.6	10.2	8.36	7.14	4.90	4.07	2.14
1.65 V	79.0	63.1	38.4	24.4	14.5	10.1	8.31	7.10	4.87	4.06	2.13
1.70 V	75.8	60.8	37.2	23.8	14.4	10.1	8.26	7.05	4.83	4.05	2.13
1.75 V	72.5	58.7	36.3	23.3	14.2	10.0	8.20	7.00	4.80	4.03	2.11
1.80 V	68.4	55.6	35.0	22.6	13.8	9.70	7.95	6.79	4.66	4.00	2.10

## Constant Power Discharge (Watts) at 25°C

End Voltage (Volts/Cell)	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60 V	880	710	440	283	169	120	98.4	84.4	58.2	48.6	25.7
1.65 V	854	693	431	278	168	119	97.8	83.9	57.8	48.5	25.6
1.70 V	818	668	418	271	167	118	97.1	83.3	57.4	48.4	25.5
1.75 V	783	645	408	266	164	118	96.4	82.7	57.0	48.1	25.4
1.80 V	739	611	393	258	160	114	93.5	80.3	55.3	47.8	25.2

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.