

# SUNLIGHT AccuForce 12V-60Ah S

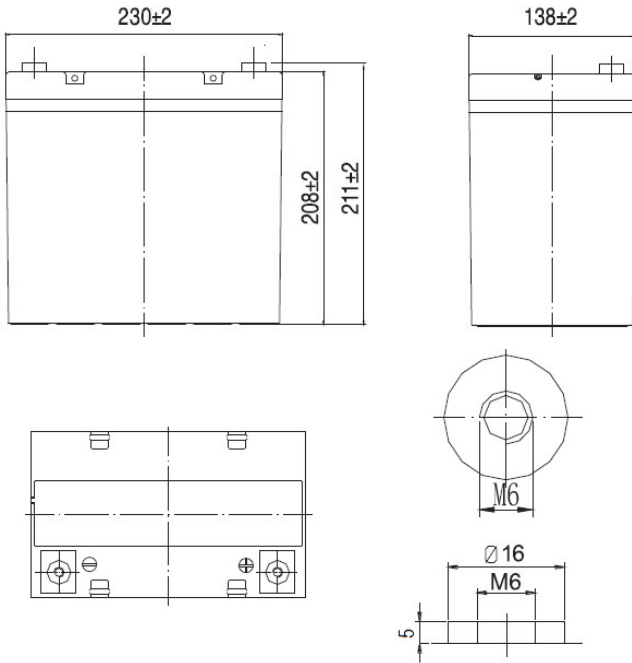
AGM VRLA Battery

## Features & Benefits

- Solar / Wind power systems
- Residential installations
- Golf carts and electric powered vehicles
- Marine equipment
- Electric wheelchairs
- Traffic systems (signaling and lighting)
- Remote monitoring and controlling
- Power tools and cleaning machines
- Uninterruptible power supply (UPS)

## Specifications

Nominal Voltage	12 V	
Number of cells	6	
Cycle Life	Approx. 800 cycles at 50% DOD	
Dimensions	Length	230 mm
	Width	138 mm
	Height	208 mm
	Total Height	211 mm
Weight		16.5 kg
	120 hours rate (1.85Vpc)	62.40 Ah
Nominal Capacity (25°C)	100 hours rate (1.85Vpc)	62.00 Ah
	48 hours rate (1.80Vpc)	60.48 Ah
	10 hour rate (1.80Vpc)	55.00 Ah
	Internal Resistance (fully charged, 25°C)	6.5 mOhm
Self Discharge	less than 3% per month at 25°C	
Nominal Operating Temperature	25°C	
Operating Temperature range	Discharge	-15°C to 45°C
	Charge	0°C to 40°C
	Storage	-15°C to 40°C
Float Charging Voltage	2.27 to 2.30 V/cell at 25°C	
	Temperature compensation	-18mV/°C
Cyclic Charging Voltage	2.40 to 2.47 V/cell at 25°C	
	Temperature compensation	-30mV/°C
Maximum charging current	16.5 A	
Maximum discharge current	550 A (5 sec.)	
Short circuit current	830 A	



## Performance Data

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

End Voltage V/cell	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60 V	87.1	54.7	33.0	19.7	13.7	11.3	9.71	8.43	6.66	5.60	2.94	----	---	---	---
1.65 V	85.0	53.7	32.6	19.6	13.6	11.2	9.65	8.35	6.62	5.59	2.93	----	---	---	---
1.70 V	81.8	51.8	31.7	19.4	13.5	11.2	9.59	8.35	6.58	5.57	2.93	1.28	---	---	---
1.75 V	79.0	50.4	31.1	19.1	13.5	11.1	9.52	8.26	6.53	5.53	2.91	1.27	0.91	---	---
1.80 V	74.8	48.4	30.2	18.6	13.0	10.7	9.23	7.97	6.33	5.50	2.89	1.26	0.88	---	---
1.85 V	70.1	45.5	28.7	17.8	12.4	10.2	8.80	7.54	6.21	5.39	2.84	1.23	0.86	0.62	0.52

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

End Voltage V/cell	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60 V	159	98.1	62.7	38.0	26.9	22.0	19.2	16.6	13.2	11.1	5.87	----	----	----	----
1.65 V	155	96.2	61.9	37.7	26.7	21.9	19.0	16.6	13.1	11.1	5.86	----	----	----	----
1.70 V	150	93.7	60.2	37.3	26.6	21.9	19.0	16.5	13.0	11.1	5.84	2.56	----	----	----
1.75 V	145	91.5	59.0	36.8	26.4	21.7	18.8	16.4	12.9	11.0	5.82	2.56	1.80	----	----
1.80 V	137	88.1	57.3	35.8	25.6	21.0	18.2	15.7	12.6	10.9	5.79	2.54	1.78	----	----
1.85 V	129	83.0	54.3	34.3	24.4	19.8	17.3	14.8	12.3	10.7	5.66	2.47	1.75	1.28	1.07

## SYSTEMS SUNLIGHT S.A.

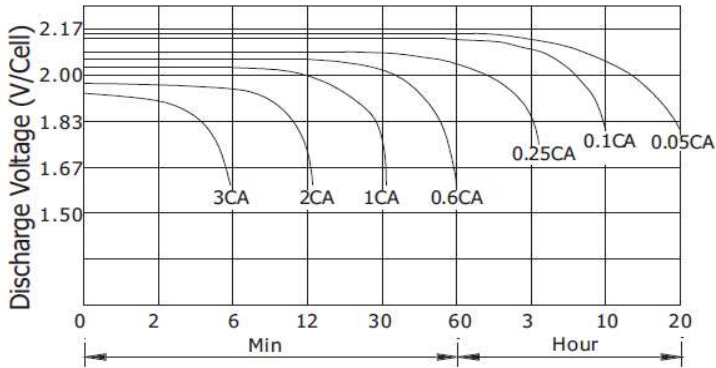
Headquarters 8, Thivaidos & Sfiggos Street | 145 64 Kifissia | Greece  
 Manufacturing Plant Neo Olvio | 672 00 Xanthi | Greece  
 Recycling Plant Industrial Area of Komotini | 691 00 Komotini | Greece  
 Southeast Europe Industrial Sales 14B Menexedon Street | 145 64 Kato Kifissia | Greece

Sunlight Batteries USA Inc. 4755 McConnell Center Drive | Greensboro | NC 27405 | USA  
 Sunlight European Battery Assembly 175, Via Stra | 37030 Colognola Ai Colli Verona | Italy  
 Sunlight Industrial SRL 111-115, Timisoara Boulevard | 061327 Bucharest | Romania  
[www.systems-sunlight.com](http://www.systems-sunlight.com)

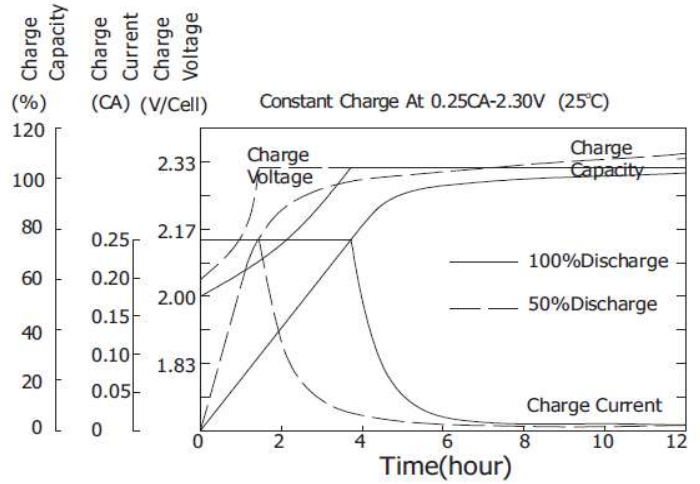
# SUNLIGHT AccuForce 12V-60Ah S

AGM VRLA Battery

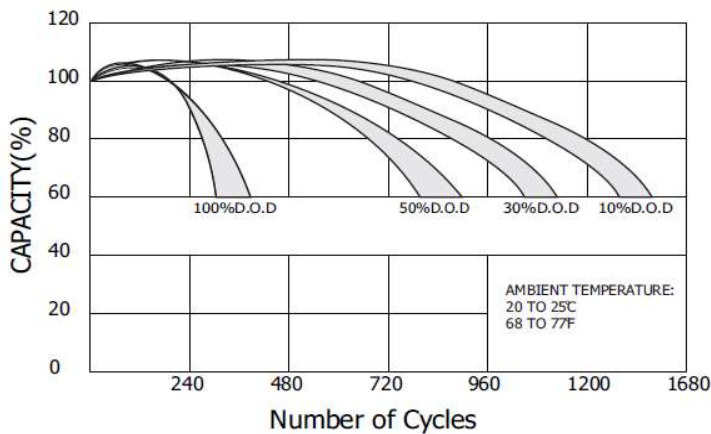
## Discharge Characteristics (25°C)



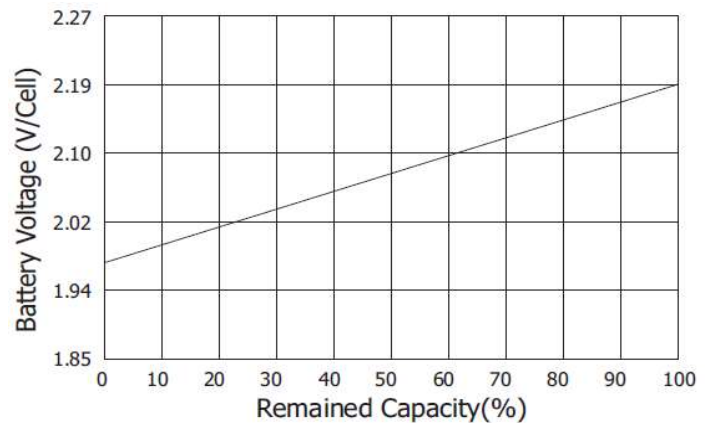
## Charging Characteristics (25°C)



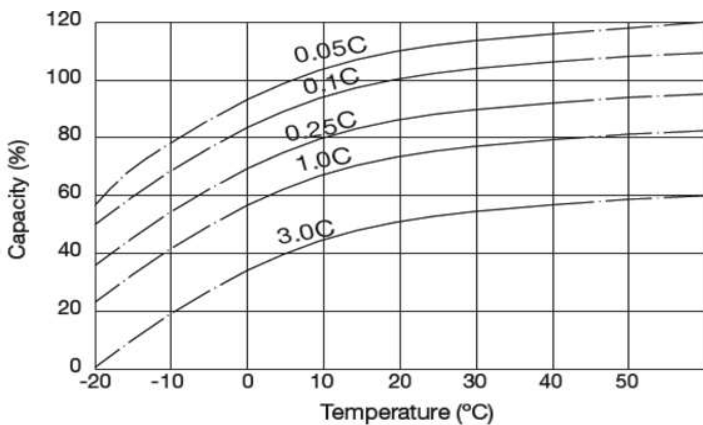
## Cycle Service Life in Relation to Depth of Discharge



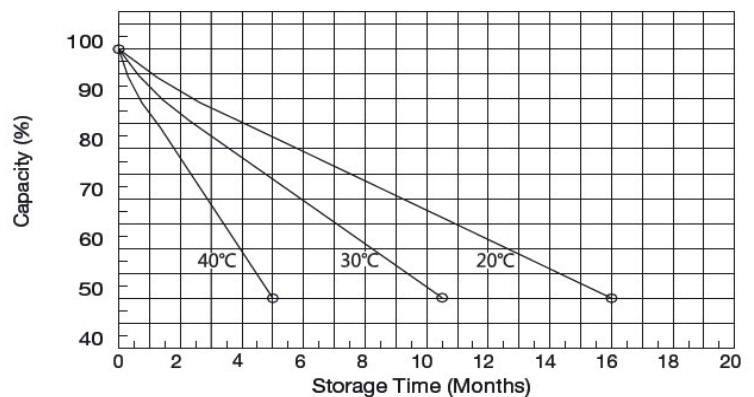
## Relationship Between OCV and Residual Capacity (25°C)



## Temperature Effects on Capacity



## Self Discharge Characteristics



## SYSTEMS SUNLIGHT S.A.

Headquarters 8, Thivaidos & Sfiggos Street | 145 64 Kifissia | Greece  
 Manufacturing Plant Neo Olvio | 672 00 Xanthi | Greece  
 Recycling Plant Industrial Area of Komotini | 691 00 Komotini | Greece  
 Southeast Europe Industrial Sales 14B Menexedon Street | 145 64 Kato Kifissia | Greece

Sunlight Batteries USA Inc. 4755 McConnell Center Drive | Greensboro | NC 27405 | USA  
 Sunlight European Battery Assembly 175, Via Stra | 37030 Colognola Ai Colli Verona | Italy  
 Sunlight Industrial SRL 111-115, Timisoara Boulevard | 061327 Bucharest | Romania  
[www.systems-sunlight.com](http://www.systems-sunlight.com)