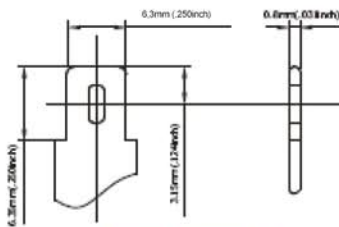




## Sun 12-7 HR



Terminal Dimensions

### HR Series

SUN HR (High-Rate) Series of valve regulated lead acid (VRLA) batteries have been developed with high efficiency active materials to stimulate inside the battery with higher power output when the battery is discharged to a extent level of discharging. Along with high-density structure design for relatively smaller Inner resistance which will significantly improve the performance for high rate discharging when high power output service is needed.

### Application

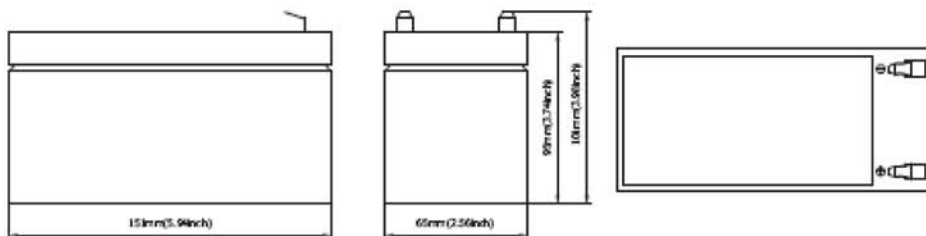
- \* Alarm System
- \* Cable Television
- \* Communication Equipment
- \* Control Equipment
- \* Security System
- \* Medical Equipment
- \* Toys
- \* UPS
- \* Emergency Power System

### General Features

- \* Sealed and maintenance free operation.
- \* Non-Spillable construction design.
- \* ABS containers and covers (UL94HB, UL94V-0) optional.
- \* Safety valve installation for explosion proof.
- \* High quality and high reliability.
- \* Exceptional deep discharge recovery performance.
- \* Low self discharge characteristic.
- \* Flexibility design for multiple install positions.

### Construction

- \* Component .....Raw material
- \* Positive .....Lead dioxide
- \* Negative .....Lead
- \* Container .....ABS
- \* Cover .....ABS
- \* Sealant .....Epoxy Resin
- \* Safety valve .....EPDR
- \* Terminal .....Copper
- \* Separator .....Fibre glass
- \* Electrolyte .....Sulfuric acid

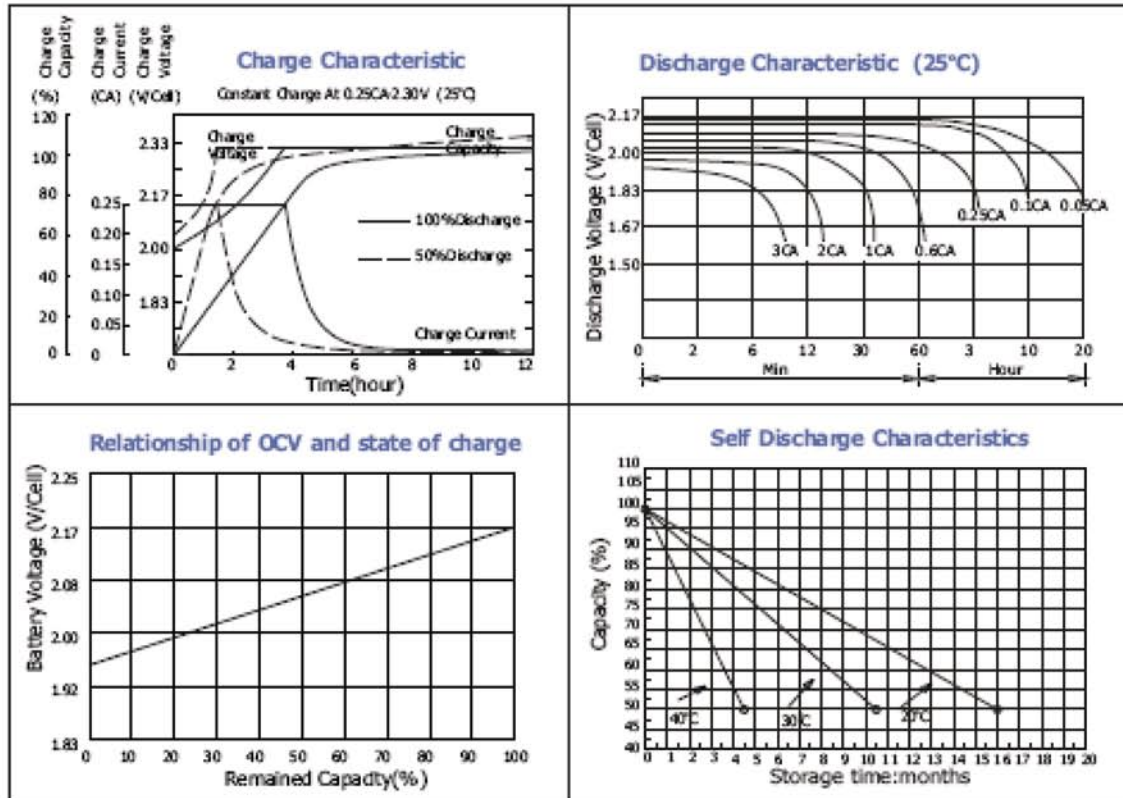


Battery Model	Sun 7-12HR (35W to 1,67V 15min)			
Designed Floating Life	5 Years			
Capacity(25°C)	20HR(4.1A,1.75V)	10HR(0.8A,1.75V)	1C(7A,1.60V)	3C(21A,1.60V)
	8.2AH	8AH	>45Min	>12Min
Dimensions	Length	Width	Height	Total Height
	151mm(5.94inch)	65mm(2.56inch)	95mm(3.74inch)	101mm(3.98inch)
Approx. Weight	2.6Kg (5.73 lbs)			
Internal Resistance	Full charged at 25°C: 0.02 Ohm			
Self Discharge	3% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.4-15V(-30mV/ °C), max. Current: 2.4A		13.6-13.8V(-20mV/ °C)	



valve regulated  
sealed lead acid type  
rechargeable battery

sunbattery®



Constant current discharge ratings-amperes at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	41.4	25.7	19.4	11.8	5.69	2.50	1.53	0.83	0.45
1.67V	38.8	24.4	18.7	11.3	5.61	2.40	1.49	0.82	0.43
1.70V	35.6	23.5	18.2	10.3	5.44	2.24	1.46	0.82	0.43
1.75V	34.9	22.8	17.6	9.78	5.18	2.17	1.43	0.81	0.42
1.80V	31.2	21.8	16.0	9.06	4.85	2.08	1.34	0.80	0.40
1.85V	27.5	20.7	14.4	8.34	4.52	2.01	1.26	0.78	0.39

Constant power discharge ratings-watts at 25°C

F. V/Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	72.6	46.5	35.4	21.3	10.3	4.43	2.58	1.71	0.90
1.67V	70.0	45.3	35.0	20.9	10.2	4.29	2.57	1.70	0.86
1.70V	65.9	44.9	34.7	19.6	10.0	4.10	2.53	1.69	0.85
1.75V	66.4	44.7	34.4	19.0	9.83	4.00	2.51	1.65	0.83
1.80V	60.7	44.0	31.9	18.1	9.27	3.88	2.43	1.60	0.81
1.85V	55.1	41.8	28.9	16.9	8.71	3.77	2.36	1.56	0.78

