



# HR12-850W(12V850W)

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	850W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 80.5Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 2.2 mΩ
Terminal	F10(M8)
Max. Discharge Current	2600A (5 sec)
Short Circuit Current	4550A
Design Life	15 years
Max. Charging Current	78.0 A
Reference Capacity	C10 249.2AH C20 260.0AH
Standby Use Voltage	13.50 V~13.62 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Equalization Voltage	14.10 V~14.40 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



HR ( High Rate ) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 15 years design life in float service. By using strong grids, thick plate and specially designed active material. It is with lower I.R, lower self discharge rate, high power, and longer service life. The HR series battery offers 30% more power output than the standard series. It is suitable for high power standby used, such as datacenter, UPS, EPS etc.



ISO 9001

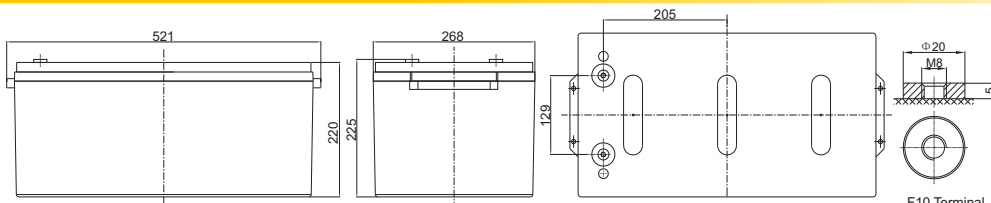


ISO 14001



OHSAS 18001

## Dimensions



Length	521±2mm (20.5 inches)
Width	268±2mm (10.6 inches)
Height	220±2mm (8.66 inches)
Total Height	225±2mm (8.86 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

### Constant Current Discharge Characteristics : A (25°C)

F.V/T ime	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	806.9	682.0	609.9	470.0	382.7	282.1	163.3	117.2
1.67V	732.2	625.4	563.7	438.3	359.7	266.9	155.7	112.4
1.70V	701.1	601.2	543.4	425.0	349.6	260.5	152.6	110.2
1.75V	647.3	560.0	509.4	402.0	332.2	249.5	147.3	106.7
1.80V	593.0	518.6	475.5	380.4	316.6	238.9	142.0	103.3
1.85V	509.0	441.8	402.8	327.1	274.7	211.3	128.3	94.2

### Constant Power Discharge Characteristics : WPC (25°C)

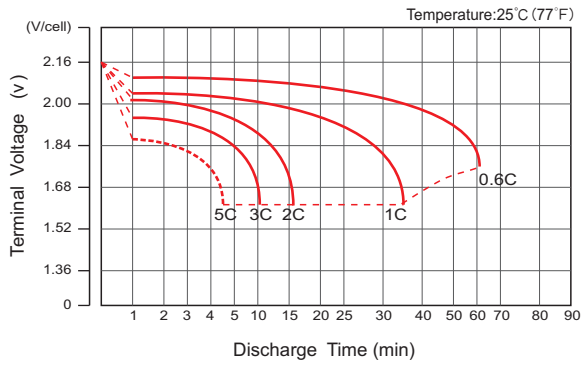
F.V/T ime	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	1483	1270	1147	895.9	735.6	548.1	306.6	221.7
1.67V	1380	1192	1083	850.0	702.0	525.6	295.1	214.4
1.70V	1335	1156	1052	830.2	686.9	515.0	290.2	211.3
1.75V	1252	1092	999.5	794.4	659.3	498.0	282.3	205.7
1.80V	1166	1025	943.8	759.0	634.5	480.6	273.9	200.0
1.85V	1015	885.5	810.4	659.7	555.9	428.7	249.1	184.0

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

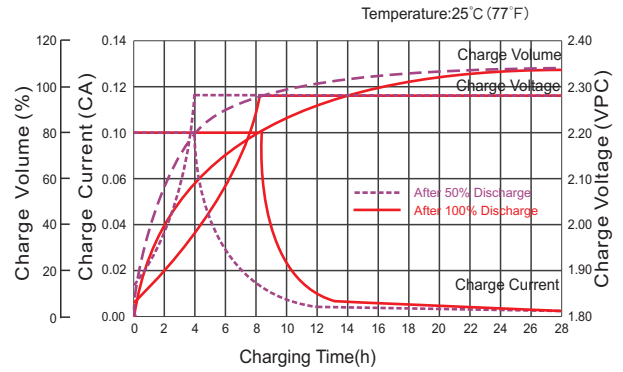
# HR12-850W(12V850W)



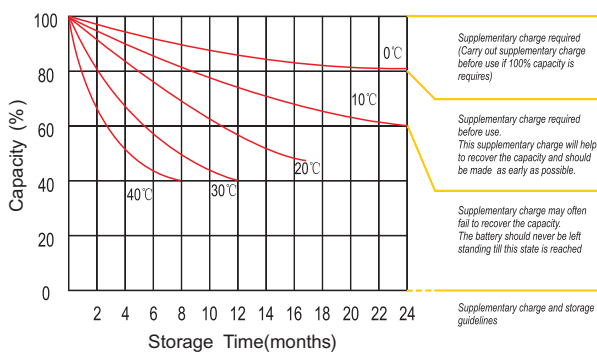
## Discharge Characteristics Curve



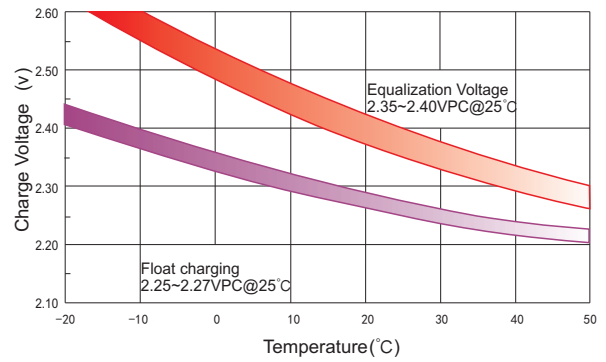
## Charge Characteristic Curve For Standby Use



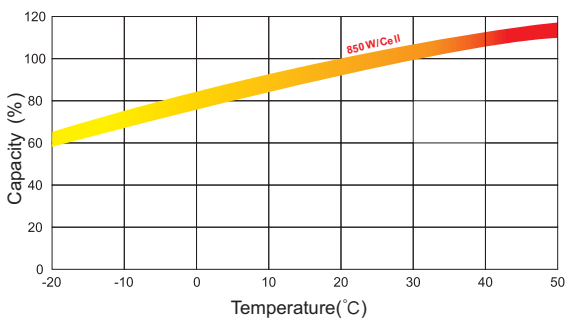
## Storage Characteristics



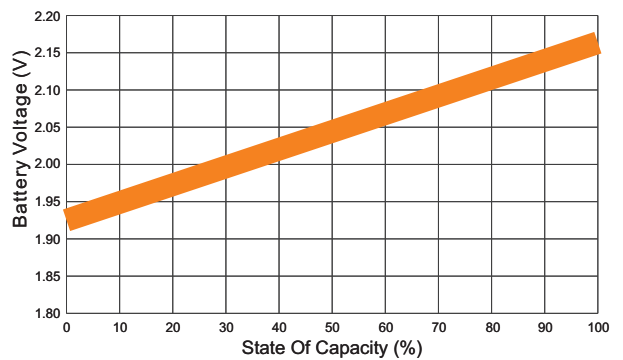
## Relationship Between Charging Voltage And Temperature



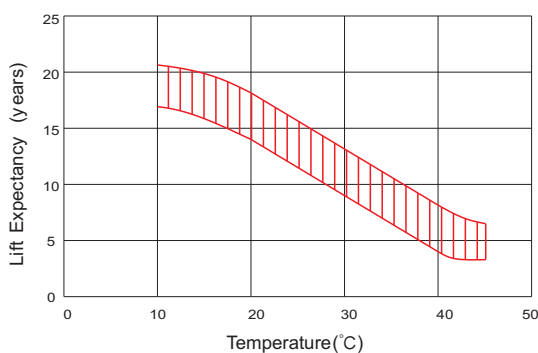
## Temperature Effects On Capacity



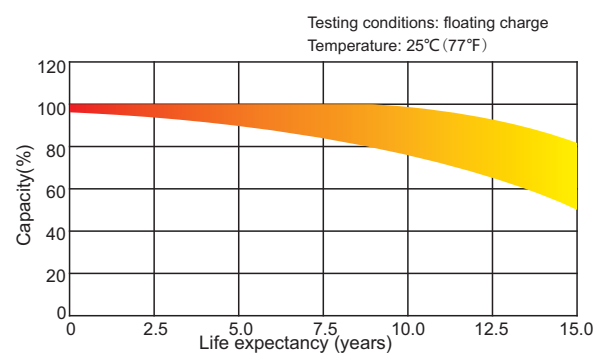
## Relationship of OCV And State of Charge(20°C)



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.