



# HR12-125W

## Specification



The HR (High Rate) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 12 years design life in float service. By using strong grids and specially designed active material the HR series is with lower I.R, lower self discharge rate, high power, and longer service life performance. Generally the HR series offers 30% more power output than the standard range. Suitable for high power standby and cycling situation, such as UPS, datacenter, electric tools et al.

Cells Per Unit	6
Voltage Per Unit	12
Capacity	125W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 10.2 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 9 mΩ
Terminal	F11(M6)
Max. Discharge Current	330A (5 sec)
Short Circuit Current	930A
Design Life	Could Reach 12 years
Recommended Maximum Charging Current	9.9 A
Reference Capacity	C10 31.2AH C20 33.0AH
Standby Use Voltage	13.6 V~13.8 V @ 25°C
Cycle Use Voltage	14.6 V~14.8 V @ 25°C
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.
Constainer Material	A.B.S. UL94-HB, UL94-V0 Optional.



## Dimensions

Length	195±1mm (7.68 inches)
Width	130±1mm (5.12 inches)
Height	155±1mm (6.10 inches)
Total Height	168±1mm (6.61 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/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	116.7	99.9	89.8	71.4	57.3	42.0	24.2	17.9
1.67V	107.9	93.7	84.3	67.7	53.5	40.1	23.0	17.0
1.70V	103.5	90.4	81.3	65.6	51.4	38.9	22.4	16.5
1.75V	97.7	85.9	76.3	62.5	50.0	37.8	22.0	16.2
1.80V	91.9	81.4	71.3	59.4	48.6	36.7	21.6	15.8
1.85V	85.8	76.5	66.1	56.0	46.9	35.3	21.0	15.3

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

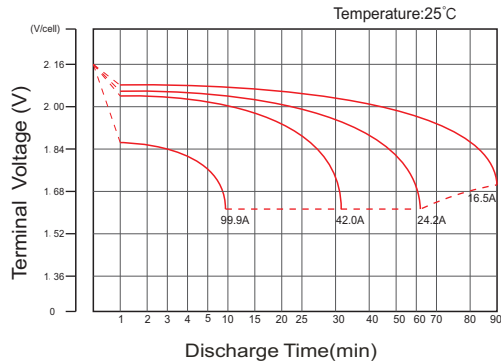
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	208	181	164	131	105	77.4	44.7	33.2
1.67V	194	171	155	125	99.3	74.5	43.0	31.9
1.70V	189	167	151	123	96.6	73.3	42.3	31.3
1.75V	180	161	144	118	95.1	72.1	42.1	31.0
1.80V	172	155	136	114	93.7	70.9	41.9	30.7
1.85V	164	148	129	110	92.2	69.7	41.7	30.4

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

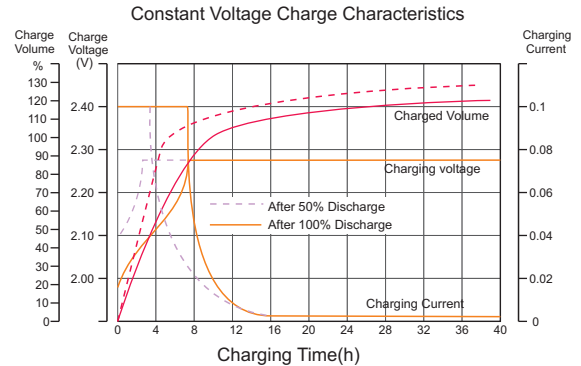
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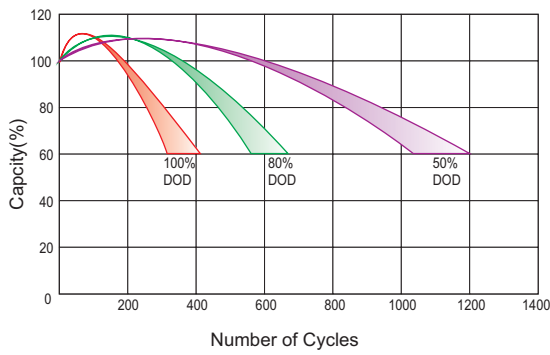
## Discharge Characteristics Curve



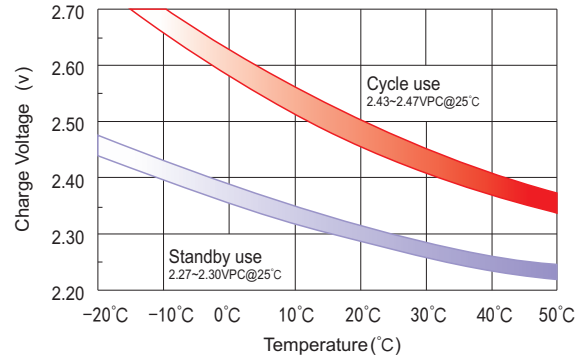
## Charge Characteristic Curve For Standby Use



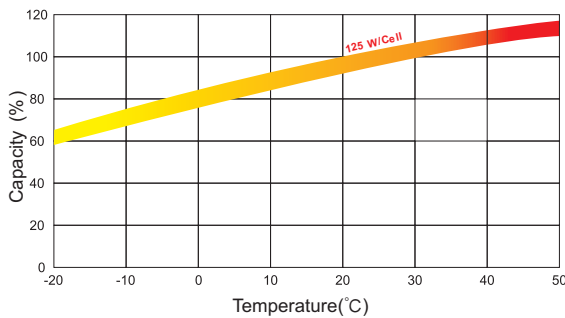
## Cycle Life In Relation To Depth Of Discharge



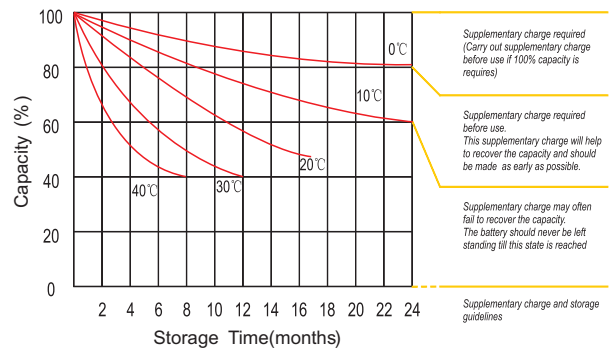
## Relationship Between Charging Voltage And Temperature



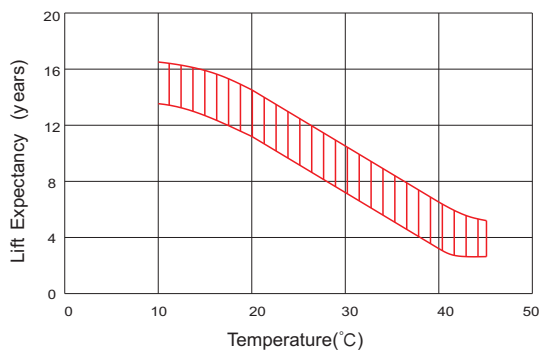
## Temperature Effects On Capacity



## Storage Characteristics



## Effect Of Temperature On Long Term Life



## Life Characteristics Of Standby Use

