

CHALLENGER BATTERY

A12HR-36W(12V36W)

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	36W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 2.40Kg (Tolerance±5%)
Internal Resistance	≤22.0 mΩ (Full Charge Condition @25°C)
Terminal	Default F2
Max. Discharge Current	90A (5 sec)
Short Circuit Current	450A
Design Life	8 years
Max. Charging Current	2.7 A
Reference Capacity	C10 8.5Ah C20 9.0Ah
Float Charging Voltage	13.5 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Equalization Charging Voltage	14.1 V~14.4 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.



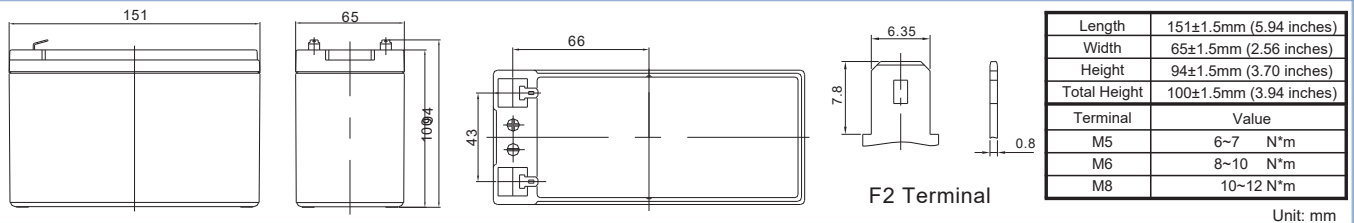
HR (High Rate) series Valve Regulated Lead Acid (VRLA) battery is designed for heavy load discharge applications with 8 years design life in float service. By using strong grids, thick plate and specially designed active material. It is with lower I.R, lower self discharge rate, high power, and longer 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 ISO 45001



Dimensions



Constant Current Discharge Characteristics : A (25°C)

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1. 60V	46.94	41.26	32.97	28.26	20.85	16.39	11.68	6.548	4.642
1. 67V	42.60	37.44	30.15	26.05	19.50	15.47	11.06	6.241	4.443
1. 70V	40.76	35.83	28.95	25.11	18.90	15.06	10.79	6.105	4.360
1. 75V	37.75	33.19	26.97	23.53	17.85	14.30	10.34	5.900	4.228
1. 80V	34.58	30.40	24.93	21.95	16.95	13.63	9.889	5.679	4.078
1. 85V	29.57	25.99	21.24	18.63	14.54	11.84	8.745	5.133	3.730

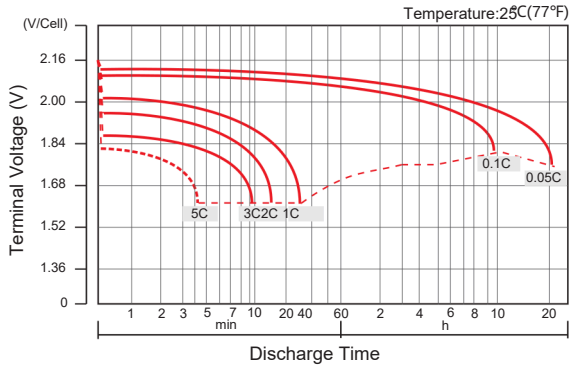
Constant Power Discharge Characteristics : W/Cell (25°C)

F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1. 60V	84.36	74.16	59.46	51.16	38.10	30.17	21.58	12.28	8.787
1. 67V	77.51	68.13	55.11	47.84	36.00	28.79	20.78	11.82	8.488
1. 70V	74.84	65.79	53.34	46.42	35.25	28.18	20.29	11.63	8.356
1. 75V	70.00	61.53	50.25	44.05	33.60	27.11	19.65	11.31	8.140
1. 80V	64.98	57.12	47.01	41.53	32.10	26.04	19.00	10.98	7.925
1. 85V	56.46	49.63	40.62	35.68	27.90	22.82	16.91	9.993	7.278

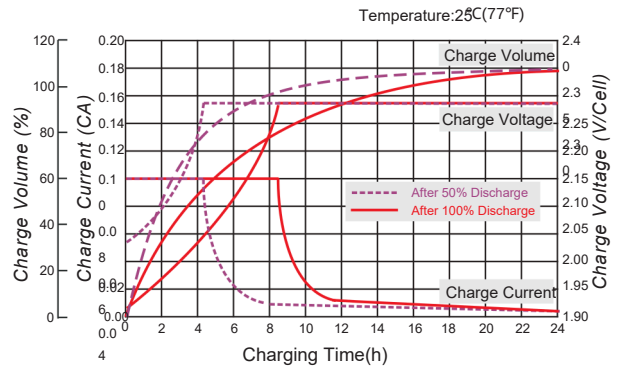
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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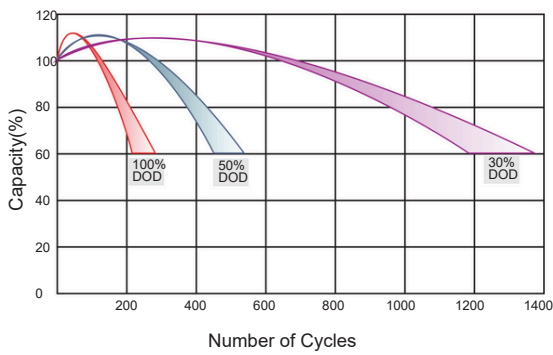
Discharge Characteristics Curve



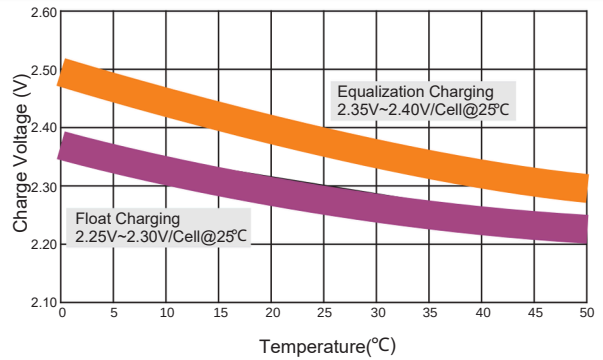
Charge Characteristic Curve For Standby Use (IU)



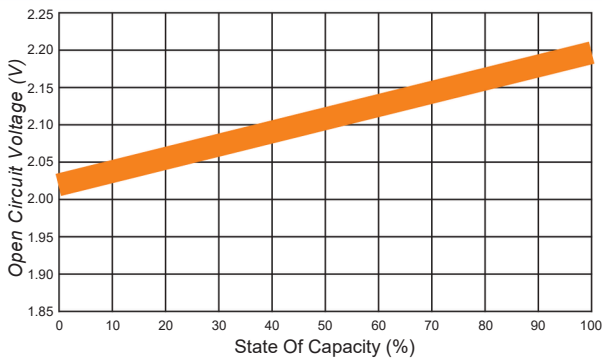
Cycle Life In Relation To Depth Of Discharge



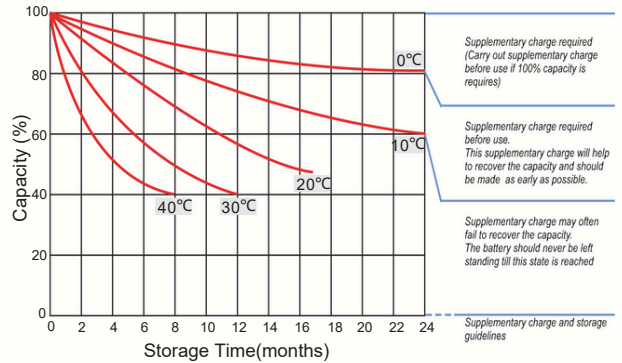
Relationship Between Charging Voltage And Temperature



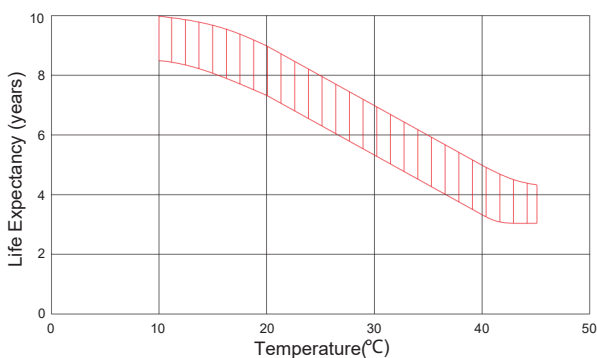
Relationship of OCV And State of Charge (20 °C)



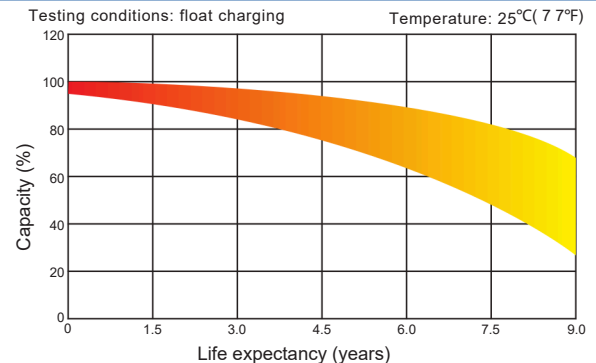
Storage Characteristics



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.