



HR12-18W(12V18W)

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	18W@15min-rate to 1.67V per cell @25°C
Weight	Approx. 1.50Kg (Tolerance±5%)
Internal Resistance	≤42.0 mΩ (Full Charge Condition @25°C)
Terminal	Default F2
Max. Discharge Current	45A (5 sec)
Short Circuit Current	250A
Design Life	8 years
Max. Charging Current	1.35A
Reference Capacity	C10 4.2Ah C20 4.5Ah
Standby Use Voltage	13.7 V~13.9 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 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

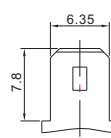
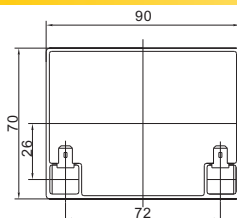
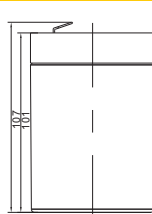
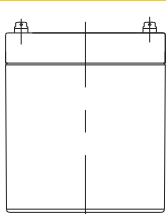


MH 28539



BSTXD210316008507EC

Dimensions



F2 Terminal

Length	90±1.5mm (3.54 inches)
Width	70±1.5mm (2.76 inches)
Height	101±1.5mm (3.98 inches)
Total Height	107±1.5mm (4.21 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	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	23.47	20.63	16.49	14.13	10.43	8.194	5.838	3.274	2.321
1.67V	21.30	18.72	15.08	13.03	9.750	7.734	5.532	3.121	2.222
1.70V	20.38	17.91	14.48	12.55	9.450	7.528	5.395	3.052	2.180
1.75V	18.88	16.59	13.49	11.76	8.925	7.152	5.170	2.950	2.114
1.80V	17.29	15.20	12.47	10.97	8.475	6.816	4.944	2.839	2.039
1.85V	14.78	13.00	10.62	9.316	7.268	5.920	4.373	2.566	1.865

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

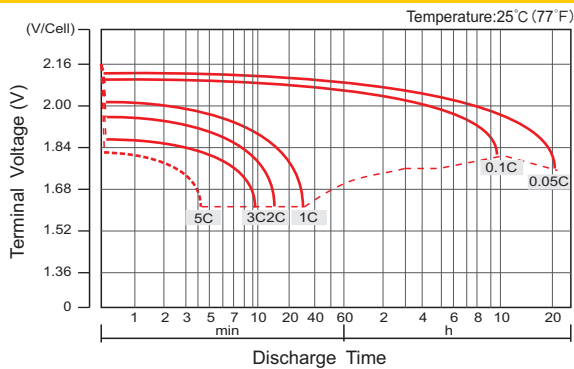
F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	42.18	37.08	29.73	25.58	19.05	15.09	10.79	6.139	4.393
1.67V	38.76	34.07	27.56	23.92	18.00	14.40	10.39	5.909	4.244
1.70V	37.42	32.89	26.67	23.21	17.63	14.09	10.15	5.815	4.178
1.75V	35.00	30.76	25.13	22.03	16.80	13.55	9.824	5.653	4.070
1.80V	32.49	28.56	23.51	20.76	16.05	13.02	9.502	5.491	3.962
1.85V	28.23	24.82	20.31	17.84	13.95	11.41	8.455	4.996	3.639

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

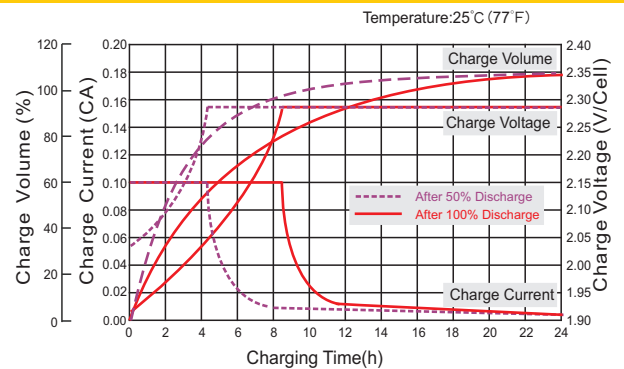
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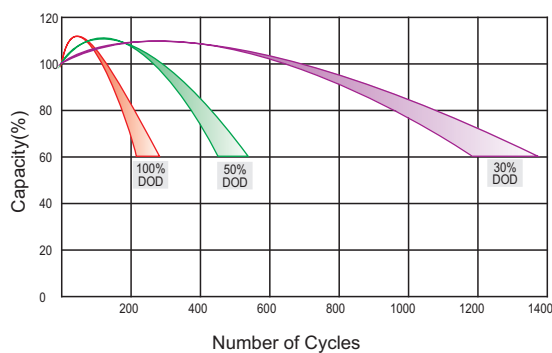
Discharge Characteristics Curve



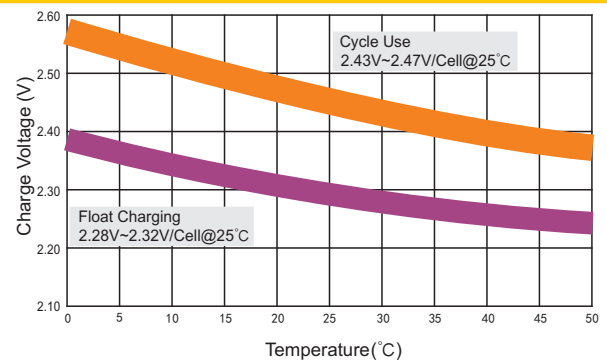
Charge Characteristic Curve For Standby Use(IU)



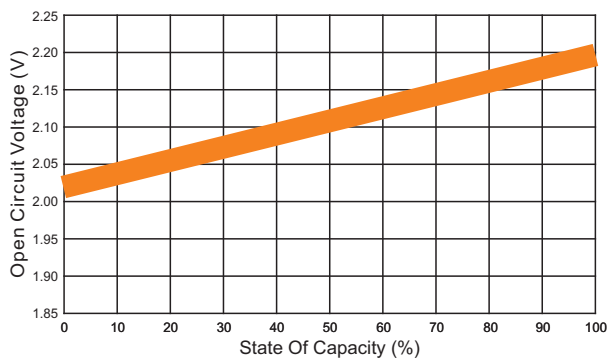
Cycle Life In Relation To Depth Of Discharge



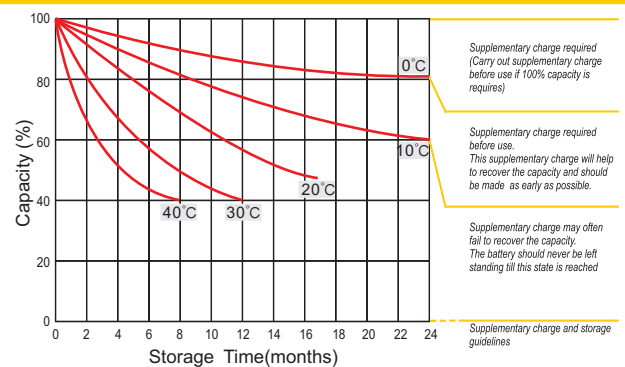
Relationship Between Charging Voltage And Temperature



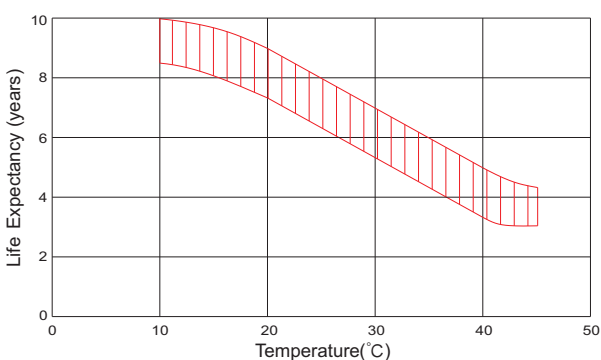
Relationship of OCV And State of Charge(20°C)



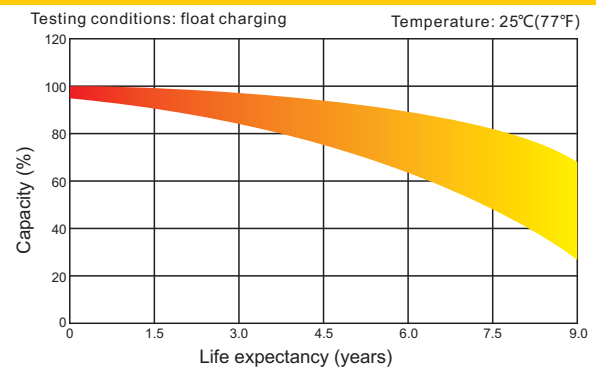
Storage Characteristics



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.