

12V-7Ah
12V28W

ener safe
A brand of  **legrand**



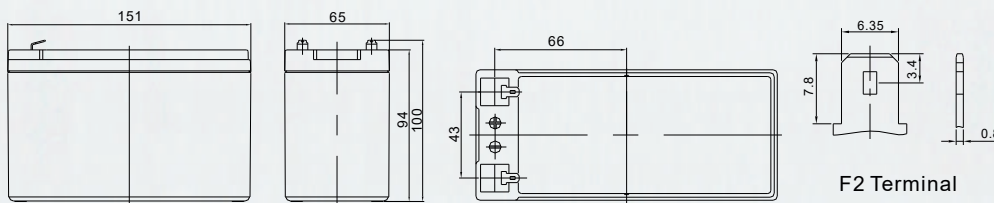
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	28W @ 15min- rate to 1.67V per cell @25
Weight	Approx. 2.8 Kg (Tolerance $\pm 5.0\%$)
Internal Resistance	Approx. 22m Ω
Terminal	F2
Max. Discharge Current	70A (5 sec)
Short Circuit Current	390A
Design Life	Could Reach 8 years
Max. Charging Current	2.1A
Reference Capacity	C10 6.5AH C20 7.0AH
Standby Use Voltage	13.7 V ~ 13.9 V @ 25°C Temperature Compensation: -3mV/ / Cell
Equalization 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 $\pm 5^\circ\text{C}$
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.



Dimensions



Length	151 $\pm$ 1mm (3594 inches)
Width	65 $\pm$ 1mm (2.56 inches)
Height	94 $\pm$ 1mm (370 inches)
Total Height	100 $\pm$ 1mm (394 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constan Current Discharge Characteristics: A (25°C)

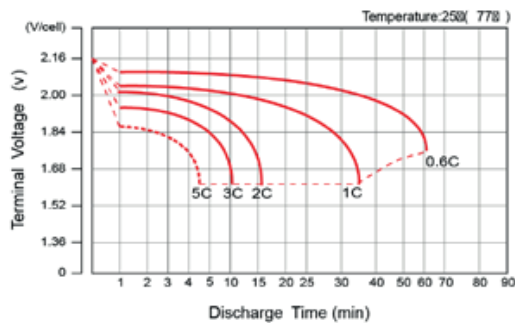
F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	36.51	32.09	25.64	21.98	16.22	12.75	9.082	5.093	3.611
1.67V	33.13	29.12	23.45	20.26	15.17	12.03	8.606	4.854	3.456
1.70V	31.70	27.87	22.52	19.53	14.70	11.71	8.393	4.748	3.391
1.75V	29.36	25.81	20.98	18.30	13.88	11.13	8.042	4.589	3.288
1.80V	26.90	23.64	19.39	10.07	13.18	10.60	7.691	4.417	3.172
1.85V	23.00	20.22	16.52	14.49	11.31	9.208	6.802	3.992	2.901

Constan Power Discharge Characteristics: WPC (25°C)

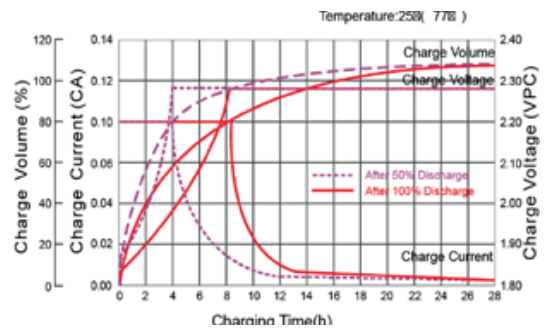
F.V/Time	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	65.61	57.68	46.25	39.79	29.63	23.47	16.79	9.549	6.834
1.67V	60.29	52.99	42.86	37.21	28.00	22.40	16.16	9.191	6.602
1.70V	58.21	51.17	41.49	36.11	27.42	21.92	15.78	9.045	6.499
1.75V	54.44	47.85	39.08	34.26	26.13	21.08	15.28	8.793	6.331
1.80V	50.54	44.43	36.56	32.30	24.97	20.25	14.78	8.541	6.164
1.85V	43.92	38.60	31.59	27.75	21.70	17.75	13.15	7.772	5.661

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

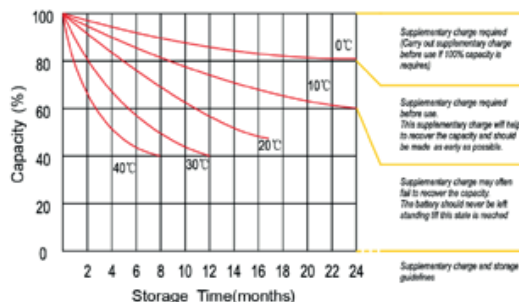
Discharge Characteristics Curve



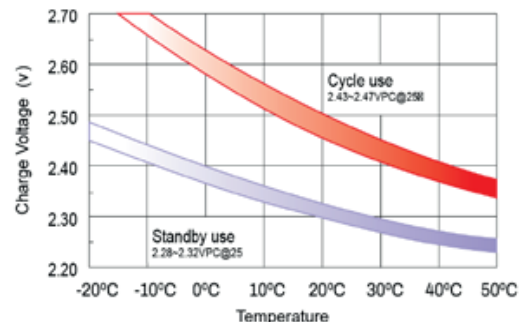
Charge Characteristic Curve For Standby Use



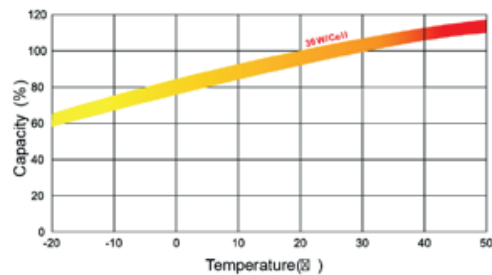
Storage Characteristics



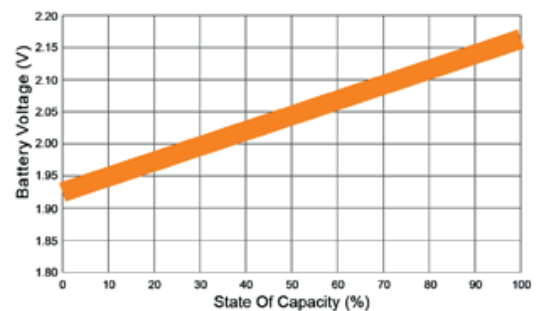
Relationship Between Charging Voltage And Temperature



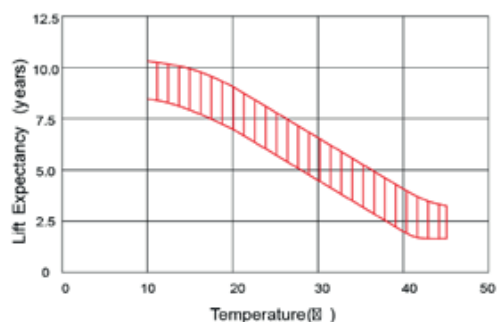
Temperature Effects On Capacity



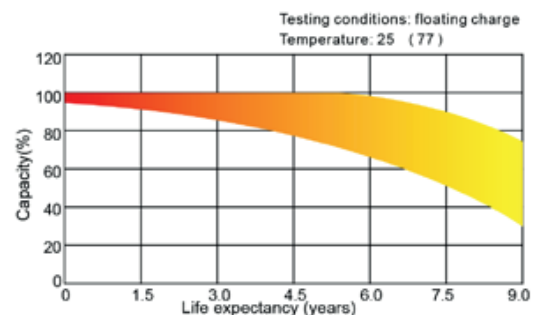
Relationship of OCV And State Of Charge (20)



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 the latest information