



RA12-134DG (12V134Ah)

RA12-134DG is GEL Deep cycle battery, with 12 years floating design life, superiorly designed for frequent cyclic discharge applications under extreme temperature. By using strong grid to insure reliable performance under frequent cyclic discharge use. 400 cycles could be available at 100% DOD. Offering extra-durable cyclic performance, high efficiency of recovery, that is more suitable for solar, mobility, E-toll, marine, deep discharge UPS etc..



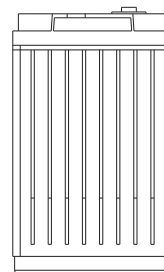
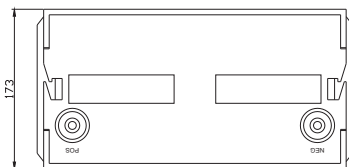
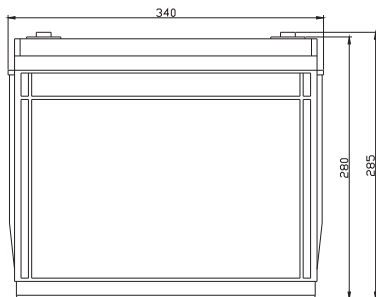
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	134Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 41.5 Kg
Max. Discharge Current	1340 A (5 sec)
Internal Resistance	Approx. 5.0 mΩ
Operating Temperature Range	Discharge: -40°C~60°C Charge:-20°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	26.8A
Equalization and Cycle Service	14.2 to 14.4VDC/unit Average at 25°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F5/F12
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.

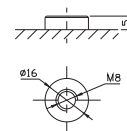


Dimensions

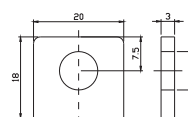
Unit: mm Dimension: 340 (L) × 173 (W) × 280 (H)



Terminal F12



Terminal F5



Constant Current Discharge Characteristics: A (25°C)

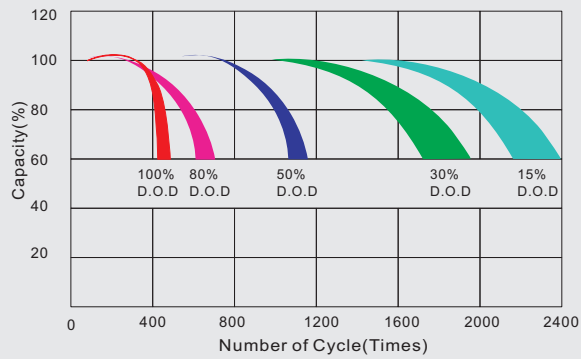
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	335.96	240.42	192.99	129.33	78.846	47.180	32.610	26.726	21.876	15.069	12.741	7.0077
10.0V	326.25	228.76	189.03	127.29	78.482	46.825	32.485	26.602	21.747	14.946	12.619	6.8803
10.2V	316.57	220.68	186.07	127.41	77.754	46.470	32.235	26.479	21.619	14.824	12.496	6.7529
10.5V	287.62	206.06	179.24	125.44	77.027	46.116	32.110	26.231	21.361	14.701	12.374	6.6255
10.8V	262.62	190.11	167.14	121.09	75.207	45.288	31.236	25.612	20.975	14.456	12.251	6.4980
11.1V	226.82	171.88	151.65	114.52	71.447	43.278	29.861	24.375	20.074	13.844	11.884	6.1158

Constant Power Discharge Characteristics: W (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3474.8	2560.4	2122.9	1474.4	911.11	556.09	388.06	318.57	260.98	179.92	152.26	84.022
10.0V	3406.4	2482.0	2088.8	1457.5	908.93	553.15	388.20	318.16	260.32	179.05	151.30	82.563
10.2V	3367.5	2416.5	2065.3	1461.4	901.91	549.81	386.50	317.48	259.42	177.88	149.95	81.034
10.5V	3101.7	2276.9	1993.2	1441.3	893.80	545.82	385.00	314.51	256.34	176.41	148.48	79.505
10.8V	2857.9	2123.5	1863.7	1394.9	877.31	538.86	374.52	307.35	251.70	173.47	147.01	77.976
11.1V	2539.1	1942.2	1696.9	1322.7	839.76	518.84	358.34	292.50	240.89	166.12	142.60	73.390

All mentioned values are average values.

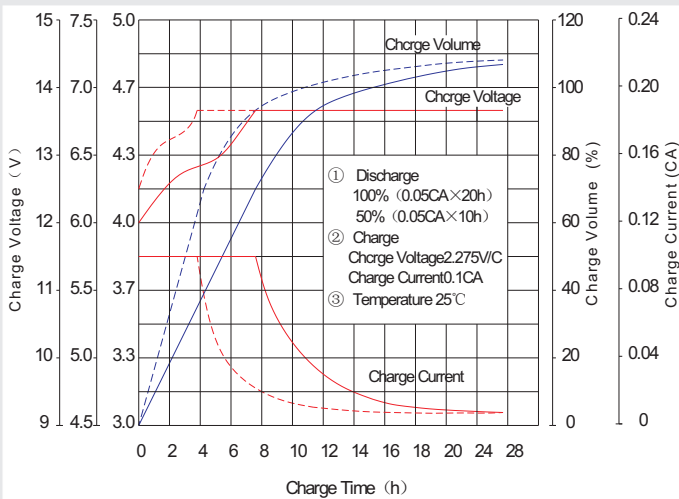
Life characteristics of cyclic use



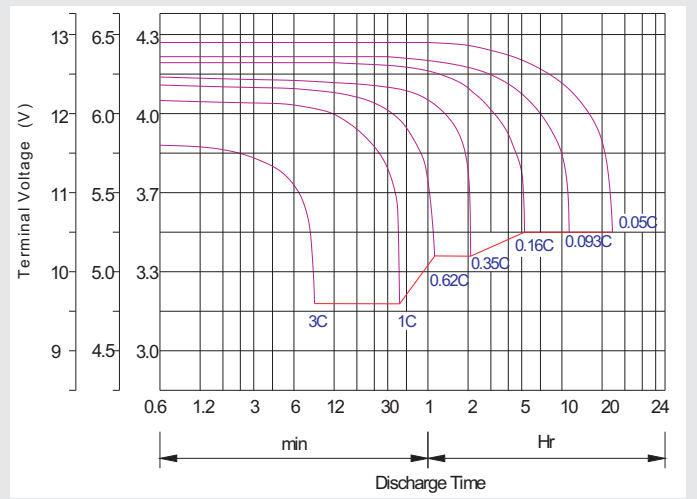
Storage characteristic



Charge characteristic curve for cyclic use



Discharge characteristic curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Maintenance & Cautions

Cycle service
※ Avoid battery over discharge, especially battery series connection use.
※ Charged with recommend voltage, ensure battery can be full recharged.
In general, recharge capacity should be 1.1-1.15 times discharge capacity.
※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.
※ There are a number of factors that will affect the length of cyclic service.
The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
Generally speaking, the most important factors is depth of discharge.

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h