



# RA12-260DG (12V260Ah)

RA12-260DG 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..



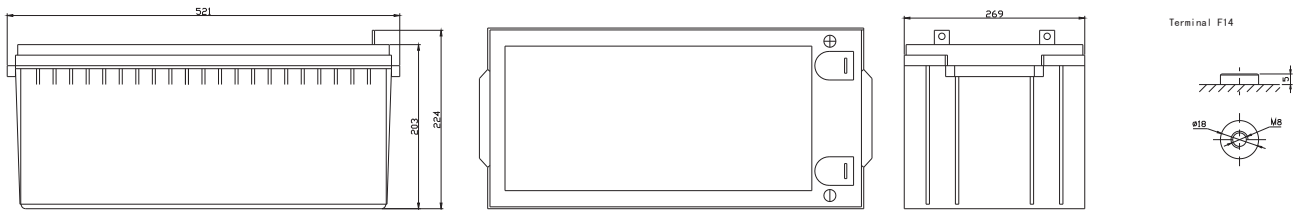
## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	260Ah@20hr-rate to 1.80V per cell @25°C
Weight	Approx. 74.0 Kg
Max. Discharge Current	2600 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	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	52A
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-d is charge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F14
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



## Dimensions

Unit: mm Dimension: 520(L)×269(W)×224(H)



### Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	632.3	452.5	363.2	243.4	148.4	88.80	61.38	50.30	41.17	28.36	23.98	13.19
10.0V	614.0	430.5	355.8	239.6	147.7	88.13	61.14	50.07	40.93	28.13	23.75	12.95
10.2V	595.8	415.3	350.2	239.8	146.3	87.46	60.67	49.84	40.69	27.90	23.52	12.71
10.5V	541.3	387.8	337.4	236.1	145.0	86.79	60.43	49.37	40.20	27.67	23.29	12.47
10.8V	494.3	357.8	314.6	227.9	141.5	85.24	58.79	48.20	39.48	27.21	23.06	12.23
11.1V	426.9	323.5	285.4	215.5	134.5	81.45	56.20	45.88	37.78	26.05	22.37	11.51

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	6540	4819	3996	2775	1715	1047	730.4	599.6	491.2	338.6	286.6	158.1
10.0V	6411	4671	3931	2743	1711	1041	730.6	598.8	489.9	337.0	284.8	155.4
10.2V	6338	4548	3887	2750	1697	1035	727.4	597.5	488.3	334.8	282.2	152.5
10.5V	5838	4285	3751	2713	1682	1027	724.6	591.9	482.4	332.0	279.5	149.6
10.8V	5379	3997	3508	2625	1651	1014	704.9	578.5	473.7	326.5	276.7	146.8
11.1V	4779	3655	3194	2490	1580	976.5	674.4	550.5	453.4	312.7	268.4	138.1

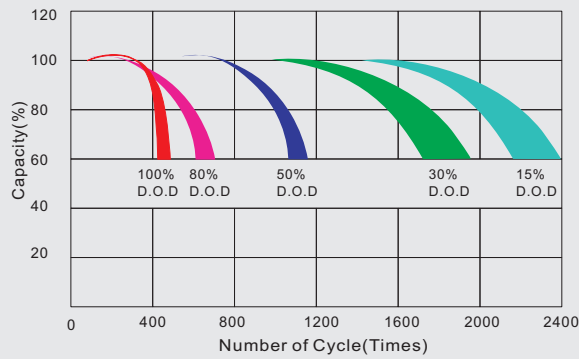
All mentioned values are average values.

# RA12-260DG

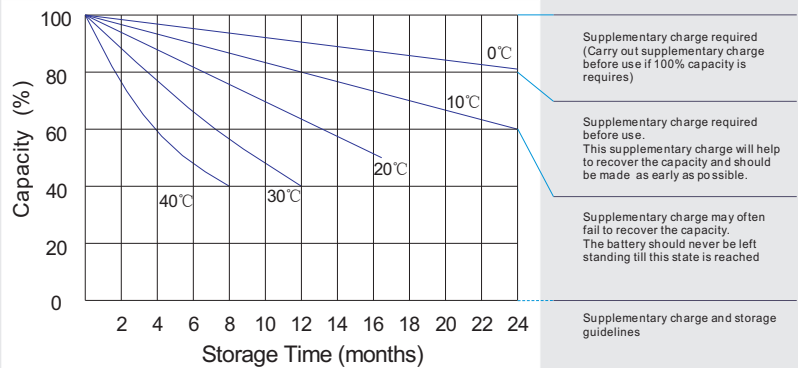
12V260Ah



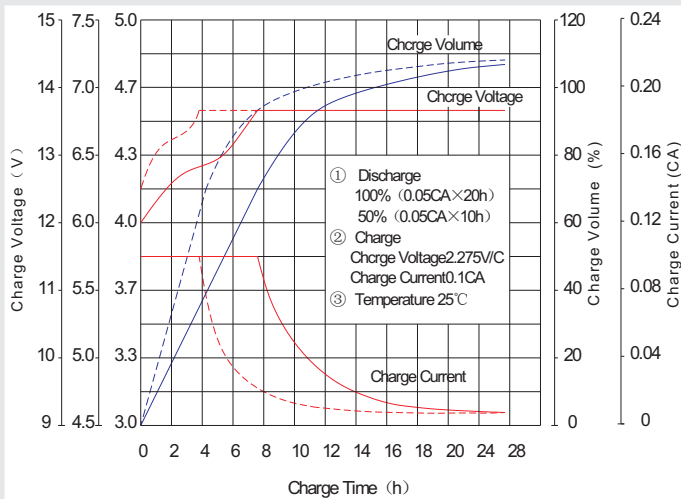
## Life characteristics of cyclic use



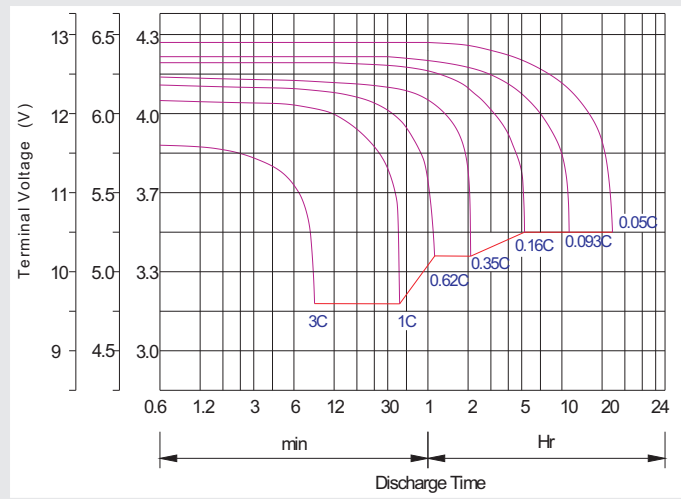
## Storage characteristic



## 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 0.3C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.2Cx6h



ELECTRONIC TECHNOLOGY SYSTEMS  
 DR. GENZ GMBH  
 COMPETENT BODY / ACCREDITED TEST HOUSE

## EC DECLARATION OF CONFORMITY

This certifies that the following designated product

**SEALED LEAD ACID RECHARGEABLE BATTERY  
 MODEL NO. : RAX**

(Product identification)

complies with the essential protection requirements of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility. This declaration applies to all specimens manufactured in accordance with the attached manufacturing drawings which form part of this declaration. Assessment of compliance of the product with the requirements relating to electromagnetic compatibility was based on the following standards:

**EN 50081-1 /1992: EN 55014  
 EN 50082-1 /1997: EN 55014-2 (EN 61000-4-2)**

(Identification of regulations / standards)

This declaration is the responsibility of the manufacturer / importer

**SHENZHEN RITAR POWER CO., LTD.  
 NO. 9 UNIT, FUQIAO NO. 2 INDUSTRY AREA, FUYONG TOWN, BAOAN DISTRICT,  
 SHENZHEN, CHINA**

(Name / Address)



THE DOC IS ONLY VALID IN CONNECTION WITH THE TEST REPORT NUMBER : G4M20206-0910-E-16

### MANUFACTURER / IMPORTER

### TEST LABORATORY

This is the result of test, that was carried out from the submitted type-samples of a product in conformity with the specification of the respective standards. The certificate holder has the right to fix the CE-mark for EMC on the product complying with the inspection sample.

(Date)

June 24, 2002

(Date)

(Surname, forename)  
 (Company stamp)



*Dr. Genz*

Dr. Genz  
 (Company stamp)



THE INTERNATIONAL CERTIFICATION NETWORK

# CERTIFICATE

IQNet and CQM  
hereby certify that the organization  
**Hengyang Ritar Power Co.,Ltd.**

Domicile: Xinzhu Village, Songmu Township, Shigu District, Hengyang City, Hunan, P.R.China  
Certification Add.:No.1, Huagong Road, Songmu Industrial Zone, Shigu Area, Hengyang City, Hunan, P.R.China

Postcode.:421001

is in conformity with

**ISO 9001:2008 Standard**

This certificate is valid to the following product(s)/service:  
**Design and production of lead-acid battery**

*Issued on: 2011-12-21*

*Validity date: 2014-12-20*

*Registration Number: CN-00211Q16746R0M*



*Michael Drechsel*  
President of IQNet

*Zhang Wei*  
President of CQM



**IQNet Partners\*:**

AENOR Spain AFNOR Certification France AIB-Vinçotte International Belgium ANCE Mexico APCER Portugal CCC Cyprus  
CISQ Italy CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany DS Denmark  
ELOT Greece FCAV Brazil FONDONORMA Venezuela ICONTEC Colombia IMNC Mexico INNORPI Tunisia  
Inspecta Certification Finland IRAM Argentina JQA Japan KFO Korea MSZT Hungary Nemko AS Norway NSAI Ireland  
PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia SIRIM QAS International Malaysia SQS Switzerland  
SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia

*IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc*

*\* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under [www.iqnet-certification.com](http://www.iqnet-certification.com)*



# IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

## CERTIFICATE

IQNet and CQM  
hereby certify that the organization  
**Hengyang Ritar Power Co.,Ltd.**

Domicile: Xinzhu Village, Songmu Township, Shigu District, Hengyang City, Hunan, P.R.China  
Certification Add.:No.1, Huagong Road, Songmu Industrial Zone, Shigu Area, Hengyang City, Hunan, P.R.China

Postcode.:421001  
is in conformity with

**ISO 14001:2004 Standard**

This certificate is valid to the following product(s)/service:  
**Design and production of lead-acid battery**

*Issued on: 2011-12-21*

*Validity date: 2014-12-20*

*Registration Number: CN-00211E21907R0M*



*Michael Drechsel*  
President of IQNet

*Zhang Wei*  
President of CQM



**IQNet Partners\*:**

- AENOR Spain AFNOR Certification France AIB-Vincotte International Belgium ANCE Mexico APCER Portugal CCC Cyprus
- CISQ Italy CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany DS Denmark
- ELOT Greece FCAV Brazil FONDONORMA Venezuela ICONTEC Colombia IMNC Mexico INNORPI Tunisia
- Inspecta Certification Finland IRAM Argentina JQA Japan KFQ Korea MSZT Hungary Nemko AS Norway NSAI Ireland
- PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia SIRIM QAS International Malaysia SQS Switzerland SRAC
- Romania TEST Si Petersburg Russia TSE Turkey YUQS Serbia

*IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.*

*\* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under [www.iqnet-certification.com](http://www.iqnet-certification.com)*