

# DG12-33(12V33Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	33Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 9.8 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 13.0 mΩ
Terminal	F7(M8)/F11 (M6)
Max. Discharge Current	330A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	6.6 A
Reference Capacity	C3 22.5AH C5 25.4AH C10 29.0AH C20 33.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.



ISO 9001



ISO 14001



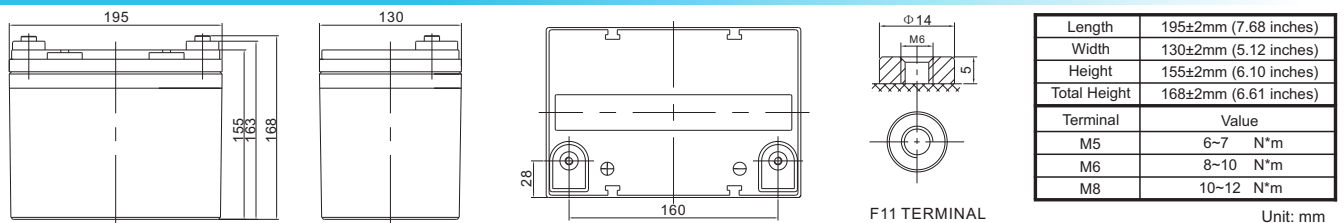
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MH 28539



## Dimensions



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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	54.0	43.8	28.7	17.9	10.9	8.21	6.55	5.49	3.71	3.06	1.72
1.65V	51.1	41.9	27.6	17.3	10.6	7.96	6.37	5.35	3.67	3.03	1.69
1.70V	47.0	39.2	26.4	16.7	10.3	7.74	6.20	5.21	3.62	2.98	1.67
1.75V	43.0	36.5	25.2	16.1	9.89	7.51	6.04	5.08	3.57	2.94	1.65
1.80V	38.9	33.7	24.1	15.5	9.54	7.28	5.87	4.95	3.51	2.90	1.63
1.85V	31.8	28.0	20.8	13.9	8.74	6.73	5.45	4.62	3.29	2.73	1.55

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	104.4	87.0	59.3	38.3	23.6	17.8	14.3	12.0	8.24	6.84	3.84
1.65V	99.3	83.7	57.5	37.2	22.9	17.4	14.0	11.8	8.15	6.76	3.79
1.70V	94.2	80.3	55.6	36.2	22.3	16.9	13.6	11.5	8.06	6.68	3.75
1.75V	87.8	75.8	53.7	35.1	21.6	16.5	13.3	11.3	7.96	6.60	3.71
1.80V	80.9	71.0	51.8	33.9	21.0	16.1	13.0	11.0	7.85	6.52	3.67
1.85V	67.3	59.7	45.1	30.6	19.3	14.9	12.1	10.3	7.38	6.15	3.49

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

The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

# DG12-40(12V40Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	40Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 12.4 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 12.0 mΩ
Terminal	F4(M6)/F11 (M6)
Max. Discharge Current	400A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	8.0 A
Reference Capacity	C3 27.3AH C5 30.8AH C10 35.2AH C20 40.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.



ISO 9001



ISO 14001



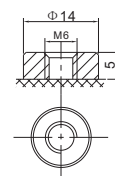
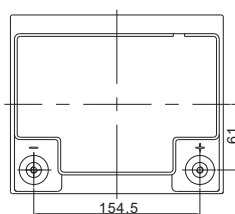
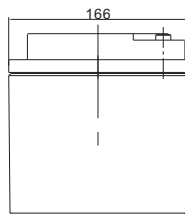
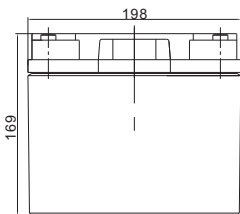
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## Dimensions



F11 TERMINAL

Length	198±2mm (7.80 inches)
Width	166±2mm (6.54 inches)
Height	169±2mm (6.65 inches)
Total Height	169±2mm (6.65 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	65.5	53.1	34.8	21.7	13.3	9.95	7.94	6.66	4.50	3.71	2.08
1.65V	61.9	50.8	33.5	21.0	12.8	9.64	7.72	6.49	4.45	3.67	2.05
1.70V	57.0	47.6	32.0	20.3	12.4	9.38	7.51	6.32	4.38	3.61	2.02
1.75V	52.1	44.3	30.6	19.6	12.0	9.10	7.32	6.16	4.32	3.57	2.00
1.80V	47.2	40.9	29.2	18.8	11.6	8.82	7.11	6.00	4.25	3.52	1.98
1.85V	38.6	33.9	25.2	16.9	10.6	8.15	6.61	5.60	3.99	3.31	1.88

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	126.5	105.5	71.9	46.4	28.6	21.6	17.3	14.6	10.0	8.30	4.66
1.65V	120.4	101.4	69.6	45.1	27.8	21.1	16.9	14.3	9.88	8.19	4.60
1.70V	114.2	97.3	67.4	43.9	27.0	20.5	16.5	13.9	9.77	8.09	4.54
1.75V	106.4	91.9	65.0	42.5	26.2	20.0	16.2	13.6	9.65	8.00	4.49
1.80V	98.0	86.0	62.8	41.1	25.4	19.5	15.7	13.3	9.51	7.90	4.45
1.85V	81.5	72.4	54.6	37.1	23.4	18.1	14.7	12.5	8.95	7.45	4.23

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

The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

# DG12-75(12V75Ah)



## Specification

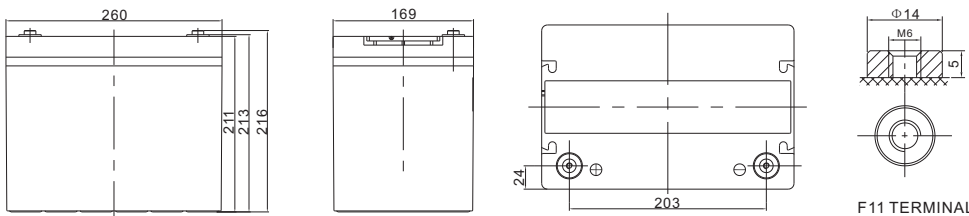
Cells Per Unit	6
Voltage Per Unit	12
Capacity	75Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 22.5 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 9.5 mΩ
Terminal	F15(M6)/F11 (M6)
Max. Discharge Current	750A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	15.0 A
Reference Capacity	C3 51.3AH C5 58.0AH C10 66.0AH C20 75.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.



## Dimensions



Length	260±2mm (10.2 inches)
Width	169±2mm (6.65 inches)
Height	211±2mm (8.31 inches)
Total Height	216±2mm (8.50 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	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	122.8	99.6	65.3	40.7	24.9	18.7	14.9	12.5	8.44	6.96	3.90
1.65V	116.0	95.2	62.7	39.3	24.1	18.1	14.5	12.2	8.35	6.88	3.84
1.70V	106.8	89.2	60.0	38.1	23.3	17.6	14.1	11.8	8.22	6.77	3.80
1.75V	97.8	83.0	57.3	36.7	22.5	17.1	13.7	11.6	8.10	6.69	3.75
1.80V	88.5	76.6	54.8	35.3	21.7	16.5	13.3	11.3	7.97	6.60	3.71
1.85V	72.3	63.6	47.2	31.6	19.9	15.3	12.4	10.5	7.48	6.21	3.52

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	237.2	197.8	134.9	87.0	53.6	40.5	32.5	27.4	18.7	15.6	8.73
1.65V	225.7	190.1	130.6	84.6	52.1	39.5	31.7	26.7	18.5	15.4	8.62
1.70V	214.2	182.5	126.3	82.2	50.7	38.5	31.0	26.1	18.3	15.2	8.51
1.75V	199.6	172.3	122.0	79.7	49.2	37.5	30.3	25.6	18.1	15.0	8.42
1.80V	183.8	161.3	117.7	77.1	47.6	36.5	29.5	25.0	17.8	14.8	8.35
1.85V	152.9	135.8	102.4	69.6	43.9	33.9	27.5	23.4	16.8	14.0	7.94

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

The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

# DG12-100(12V100Ah)



## Specification



DG (Deep Cycle GEL ) series is pure GEL battery with 15 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.

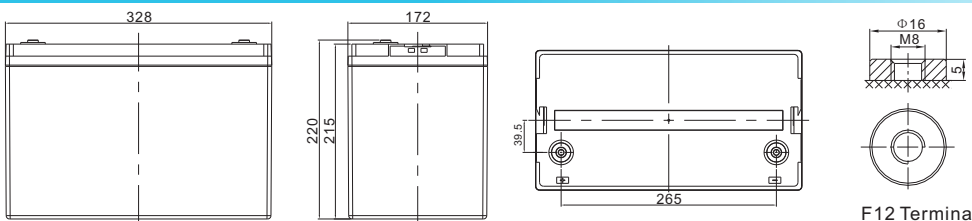


Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 29.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 7.5 mΩ
Terminal	F12(M8)/F5 (M8)
Max. Discharge Current	1000A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	20.0 A
Reference Capacity	C3 68.4AH C5 77.0AH C10 88.0AH C20 100.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



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## Dimensions



Length	328±2mm (12.9 inches)
Width	172±2mm (6.77 inches)
Height	215±2mm (8.46 inches)
Total Height	220±2mm (8.66 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

F12 Terminal

Unit: mm

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	163.7	132.8	87.1	54.3	33.2	24.9	19.8	16.7	11.3	9.28	5.20
1.65V	154.7	126.9	83.6	52.4	32.1	24.1	19.3	16.2	11.1	9.17	5.12
1.70V	142.4	118.9	79.9	50.7	31.1	23.5	18.8	15.8	11.0	9.03	5.06
1.75V	130.4	110.6	76.4	48.9	30.0	22.8	18.3	15.4	10.8	8.91	5.00
1.80V	118.0	102.2	73.0	47.0	28.9	22.0	17.8	15.0	10.6	8.80	4.95
1.85V	96.4	84.8	62.9	42.2	26.5	20.4	16.5	14.0	10.0	8.28	4.70

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	316.2	263.8	179.8	116.0	71.5	54.0	43.3	36.5	25.0	20.7	11.6
1.65V	300.9	253.5	174.1	112.8	69.5	52.7	42.3	35.7	24.7	20.5	11.5
1.70V	285.6	243.3	168.4	109.6	67.6	51.3	41.3	34.9	24.4	20.2	11.4
1.75V	266.1	229.7	162.6	106.3	65.5	50.0	40.4	34.1	24.1	20.0	11.2
1.80V	245.1	215.1	157.0	102.8	63.5	48.7	39.4	33.3	23.8	19.8	11.1
1.85V	203.9	181.0	136.6	92.8	58.5	45.2	36.7	31.2	22.4	18.6	10.6

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

The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

# DG12-150(12V150Ah)



## Specification

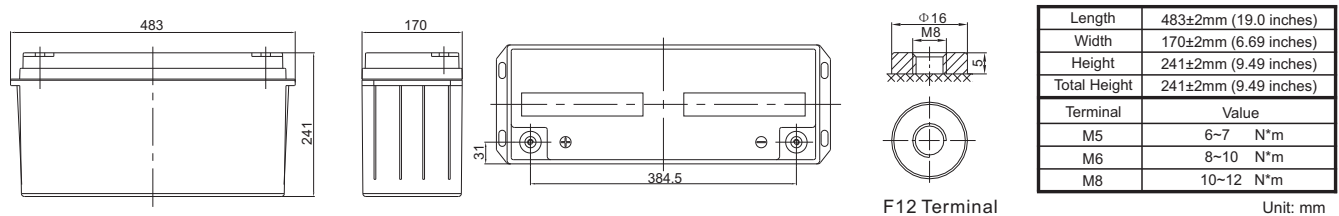
Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 43.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 6.0 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1500A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	30.0 A
Reference Capacity	C3 102.3AH C5 115.5AH C10 132.0AH C20 150.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.



## Dimensions



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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	245.6	199.2	130.7	81.5	49.8	37.3	29.8	25.0	16.9	13.9	7.81
1.65V	232.1	190.4	125.5	78.7	48.2	36.2	29.0	24.3	16.7	13.8	7.68
1.70V	213.6	178.3	119.9	76.1	46.6	35.2	28.2	23.7	16.4	13.5	7.59
1.75V	195.6	166.0	114.6	73.3	45.0	34.1	27.5	23.1	16.2	13.4	7.50
1.80V	177.0	153.2	109.5	70.5	43.4	33.1	26.7	22.5	15.9	13.2	7.42
1.85V	144.7	127.2	94.3	63.2	39.7	30.6	24.8	21.0	15.0	12.4	7.05

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	474.4	395.7	269.7	173.9	107.2	81.0	65.0	54.7	37.5	31.1	17.5
1.65V	451.4	380.3	261.2	169.2	104.3	79.0	63.4	53.5	37.1	30.7	17.2
1.70V	428.4	364.9	252.6	164.5	101.4	77.0	61.9	52.3	36.6	30.3	17.0
1.75V	399.2	344.5	243.9	159.4	98.3	75.0	60.6	51.1	36.2	30.0	16.8
1.80V	367.6	322.6	235.5	154.2	95.3	73.0	59.1	50.0	35.7	29.6	16.7
1.85V	305.8	271.5	204.8	139.2	87.8	67.8	55.1	46.8	33.6	27.9	15.9

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

# DG12-200(12V200Ah)



## Specification

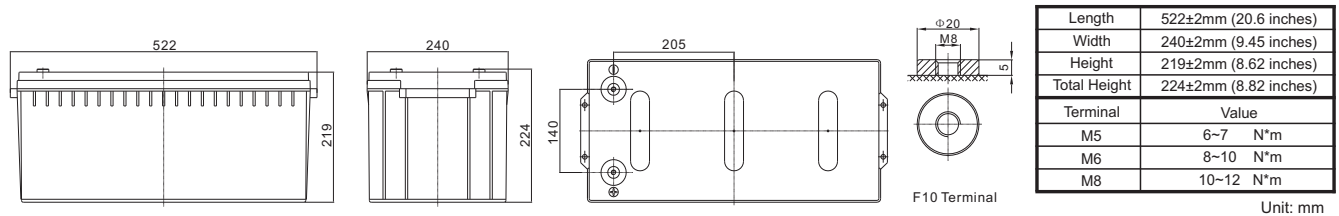
Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 58.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 5.2 mΩ
Terminal	F10(M8)/F16 (M8)
Max. Discharge Current	2000A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	40.0 A
Reference Capacity	C3 136.5AH C5 154.0AH C10 176.0AH C20 200.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



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## Dimensions



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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	327.4	265.5	174.2	108.6	66.4	49.7	39.7	33.3	22.5	18.6	10.4
1.65V	309.4	253.9	167.3	104.9	64.2	48.2	38.6	32.4	22.3	18.3	10.2
1.70V	284.9	237.8	159.9	101.5	62.1	46.9	37.6	31.6	21.9	18.1	10.1
1.75V	260.7	221.3	152.8	97.8	60.0	45.5	36.6	30.8	21.6	17.8	10.0
1.80V	236.0	204.3	146.1	94.0	57.8	44.1	35.6	30.0	21.2	17.6	9.90
1.85V	192.9	169.5	125.8	84.3	53.0	40.8	33.0	28.0	19.9	16.6	9.40

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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	632.5	527.5	359.6	231.9	142.9	108.0	86.6	72.9	50.0	41.5	23.3
1.65V	601.8	507.0	348.2	225.6	139.1	105.3	84.6	71.3	49.4	41.0	23.0
1.70V	571.1	486.5	336.8	219.3	135.2	102.7	82.6	69.7	48.8	40.5	22.7
1.75V	532.2	459.3	325.2	212.6	131.1	100.0	80.8	68.2	48.3	40.0	22.5
1.80V	490.2	430.1	314.0	205.6	127.0	97.3	78.7	66.7	47.6	39.5	22.3
1.85V	407.7	362.0	273.1	185.5	117.0	90.4	73.5	62.4	44.7	37.3	21.2

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

The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

# DG12-230 (12V230Ah)



## Specification

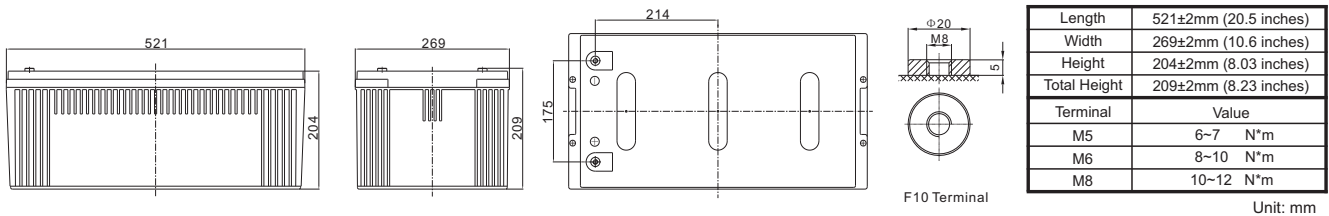
Cells Per Unit	6
Voltage Per Unit	12
Capacity	230Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 67.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 4.0 mΩ
Terminal	F10(M8)
Max. Discharge Current	2300A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	46.0 A
Reference Capacity	C3 156.9AH C5 177.0AH C10 202.0AH C20 230.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.



## Dimensions



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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	305.4	200.4	124.9	76.3	57.2	45.7	38.3	25.9	21.4	12.0
1.65V	292.0	192.4	120.6	73.9	55.4	44.4	37.3	25.6	21.1	11.8
1.70V	273.5	183.9	116.7	71.4	53.9	43.2	36.3	25.2	20.8	11.6
1.75V	254.5	175.7	112.4	69.0	52.3	42.1	35.4	24.9	20.5	11.5
1.80V	235.0	168.0	108.1	66.5	50.7	40.9	34.5	24.4	20.2	11.4
1.85V	195.0	144.7	97.0	60.9	46.9	38.0	32.2	22.9	19.1	10.8

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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	606.7	413.6	266.7	164.4	124.2	99.6	83.9	57.5	47.7	26.8
1.65V	583.1	400.5	259.5	159.9	121.1	97.3	82.0	56.8	47.1	26.4
1.70V	559.5	387.3	252.2	155.5	118.1	95.0	80.2	56.2	46.5	26.1
1.75V	528.3	374.0	244.4	150.7	115.0	92.9	78.4	55.5	46.0	25.8
1.80V	494.7	361.1	236.5	146.1	111.9	90.5	76.7	54.7	45.4	25.6
1.85V	416.3	314.1	213.4	134.6	103.9	84.5	71.7	51.5	42.8	24.3

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

The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

# DG12-260(12V260Ah)



## Specification

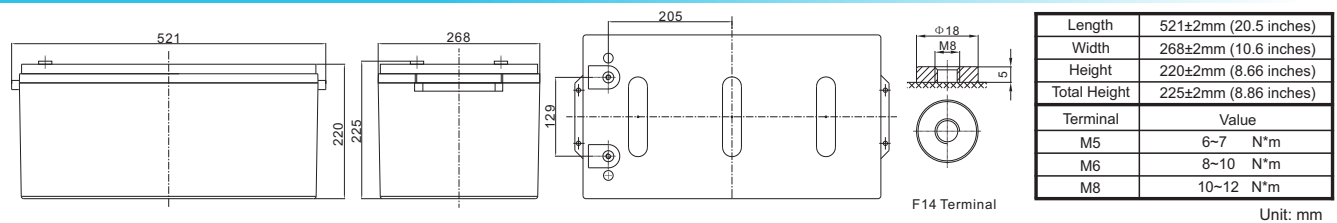
Cells Per Unit	6
Voltage Per Unit	12
Capacity	260Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 71.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 4.0 mΩ
Terminal	F14(M8)
Max. Discharge Current	2600A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	52.0 A
Reference Capacity	C3 177.6AH C5 200.0AH C10 229.0AH C20 260.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DG (Deep Cycle GEL) series is pure GEL battery with 15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the DG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.



## Dimensions



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

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	345.2	226.5	141.2	86.3	64.7	51.6	43.3	29.3	24.1	13.5
1.65V	330.0	217.5	136.3	83.5	62.7	50.2	42.2	28.9	23.8	13.3
1.70V	309.1	207.9	131.9	80.8	61.0	48.8	41.1	28.5	23.5	13.2
1.75V	287.7	198.7	127.1	77.9	59.2	47.6	40.0	28.1	23.2	13.0
1.80V	265.6	189.9	122.2	75.2	57.3	46.2	39.0	27.6	22.9	12.9
1.85V	220.4	163.5	109.6	68.9	53.0	43.0	36.4	25.9	21.5	12.2

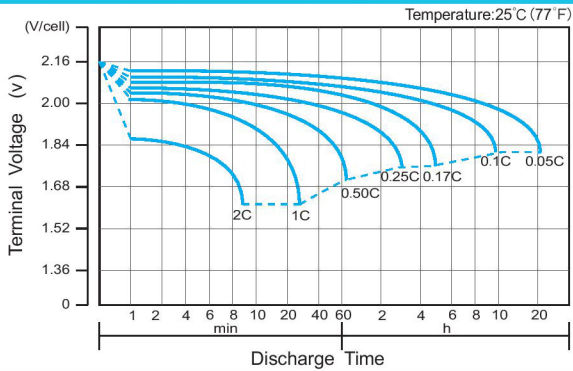
### Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	685.8	467.5	301.5	185.8	140.4	112.6	94.8	64.9	53.9	30.3
1.65V	659.2	452.7	293.3	180.8	136.9	110.0	92.7	64.2	53.3	29.9
1.70V	632.5	437.9	285.1	175.8	133.5	107.4	90.6	63.5	52.6	29.5
1.75V	597.2	422.8	276.3	170.4	130.1	105.0	88.6	62.7	52.0	29.2
1.80V	559.2	408.2	267.3	165.1	126.5	102.4	86.7	61.8	51.4	28.9
1.85V	470.6	355.1	241.2	152.1	117.5	95.5	81.1	58.2	48.4	27.5

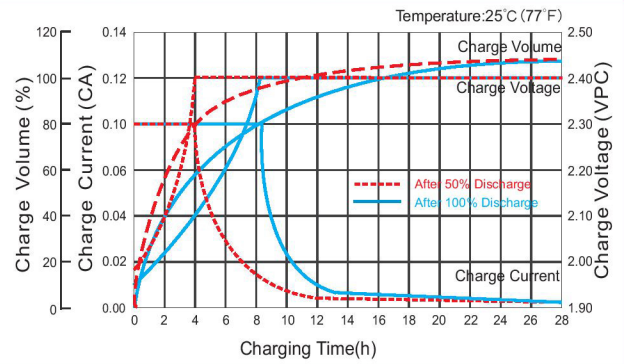
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.



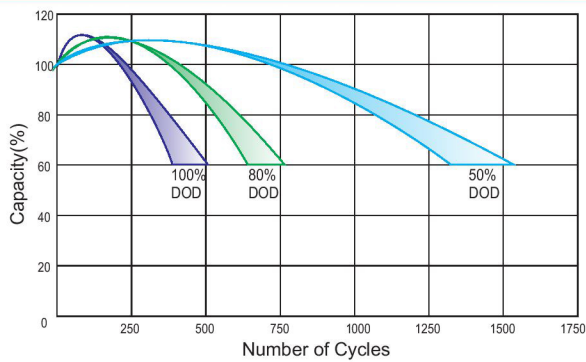
### Discharge Characteristics Curve



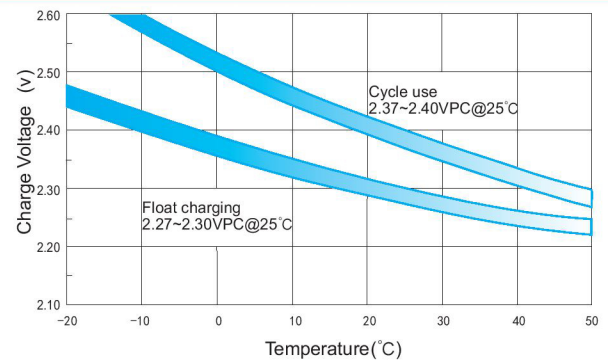
### Charge Characteristic Curve for Cycle Use(IU)



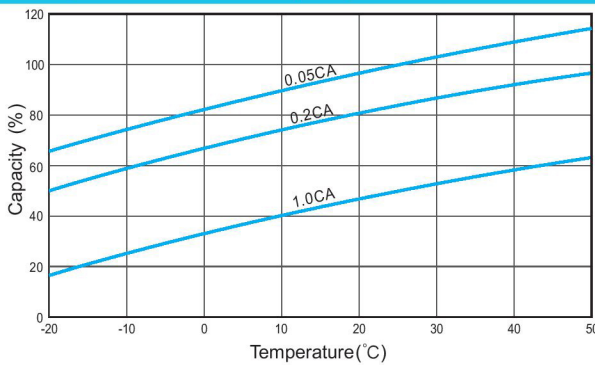
### Cycle Life in Relation to Depth of Discharge



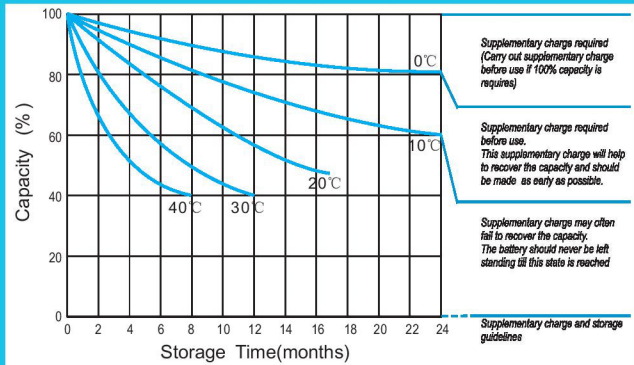
### Relationship Between Charging Voltage and Temperature



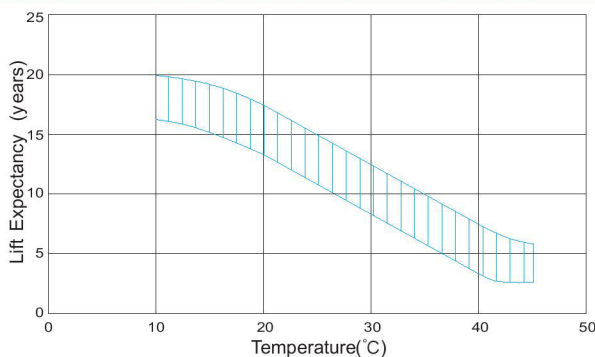
### Temperature Effects on Capacity



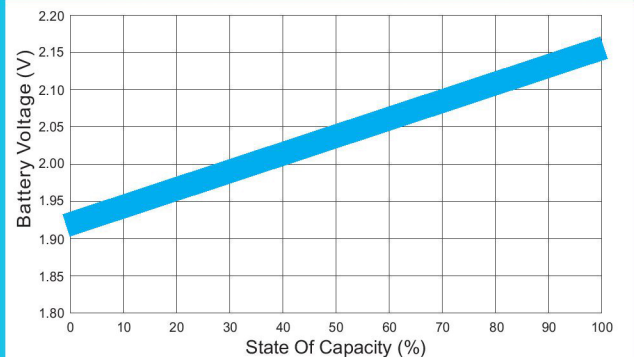
### Storage Characteristics



### Effect of Temperature on Long Term Life



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



(Note) All above information shall be changed without prior notice, Ritar reserves the right to explain and update the latest information.