DC2-600 (2V600Ah)

DC (Deep Cycle) series is specially designed for frequent cyclic discharge. By using strong grids and specially designed active material, the DC series battery offers 30% more cyclic life than the standby series. It is suitable for solar energy systems, marine and RV etc.

AUS CELL No. 1

Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	600Ah@10hr-rate to 1.80V per cell @25℃
Weight	Approx. 37 Kg (Tolerance ±2%)
Max. Discharge Current	3000 A (5 sec)
Internal Resistance	Approx.0.63 mΩ
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Float charging Voltage	2.27 to 2.3 VDC/unit Average at 25℃
Recommended Maximum Charging Current	120 A
Equalization and Cycle Service	2.43 to 2.47 VDC/unit Average at 25℃
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25℃. Self-discharge ratio less than 3% per month at 25℃. Please charge batteries before using.
Terminal	Thread insert & Bolt (F10)
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

MH28539

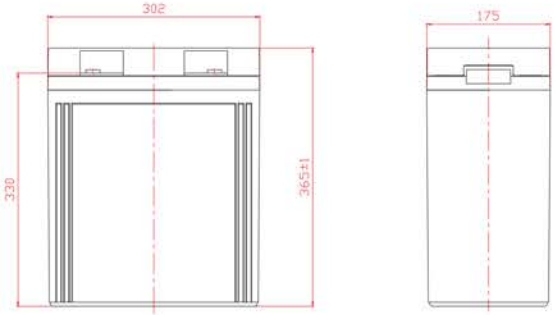
G4M20206-0910-E-16

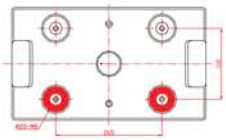
IQNet CERTIFICATE Postcode :421001 is in conformity with ISO 14001:2004 Standard

IQNet CERTIFICATE Postcode :421001 is in conformity with OHSAS 18001:1999 Standard

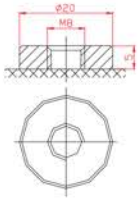
Dimensions

Unit: mm Dimension: 302(L)×175(W)×365(H)





Terminal F10



Constant Current Discharge Characteristics: A (25℃)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	814.6	600.8	374.6	229.8	171.2	122.8	107.5	96.51	77.91	62.49
1.65V	774.6	576.8	369.9	221.4	164.0	118.5	106.4	94.19	74.42	61.90
1.70V	722.3	543.8	362.7	217.9	160.4	117.4	104.9	91.86	73.26	61.30
1.75V	641.3	489.4	334.0	205.9	152.0	111.0	103.5	87.21	70.93	60.65
1.80V	552.0	445.7	314.8	196.3	146.0	109.9	101.7	86.05	69.77	60.08
1.85V	466.8	401.3	290.9	185.5	138.9	101.3	95.76	81.40	66.28	56.41

Constant Power Discharge Characteristics: W (25℃)

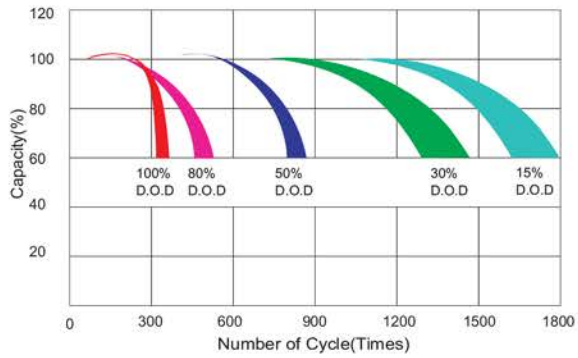
F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	1426	1095	697.1	430.0	319.0	230.8	213.7	186.2	148.3	124.5
1.65V	1389	1089	693.5	423.8	312.7	227.4	211.7	183.8	147.0	123.3
1.70V	1312	1031	686.6	417.6	308.0	226.5	209.2	179.6	144.7	122.6
1.75V	1169	928.8	644.0	395.3	296.9	215.1	206.3	170.7	140.2	121.4
1.80V	1011	847.4	612.4	377.5	284.6	214.1	202.7	168.7	137.9	120.4
1.85V	862.6	764.0	568.1	357.4	271.2	198.3	191.2	159.8	131.1	113.4

All mentioned values are average values (Tolerance ±2%).

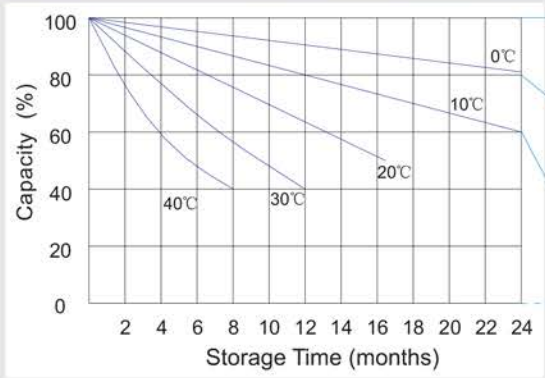
DC2-600

2V600Ah

Life characteristics of cyclic use



Storage characteristic



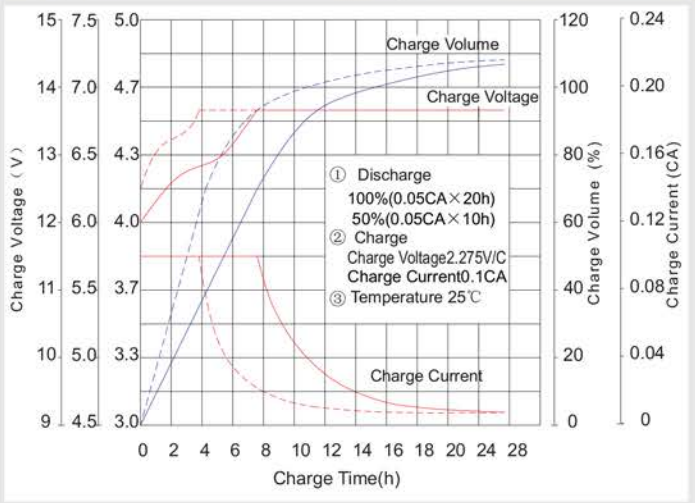
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

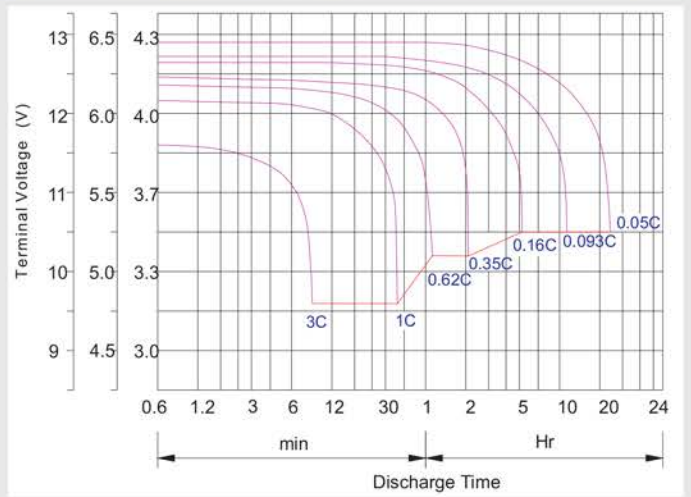
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic curve



Capacity Factors With Different Temperature

Battery Type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
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

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

Charging Method:

Constant Voltage	-0.2Cx2h+2.4-2.45V/cellx24h,Max. Current 0.2C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.2Cx6h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N-m	8~10N-m	10~12N-m

Maintenance & Cautions

Cycle service
※ Avoid battery over discharge, especially battery sereis 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/℃/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 specking, the most important factors is depth of discharge.