



Specification Sheet

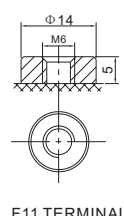
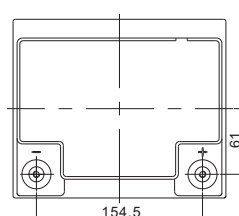
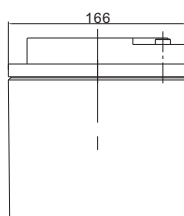
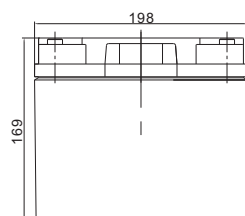
Deep Cycle VRLA Battery

DC12-50 (12V50Ah)

Cells Per Unit	6
Voltage Per Unit	12
Capacity	50Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 14.0 Kg (Tolerance ± 3.0%)
Internal Resistance	Approx. 6.80 mΩ
Terminal	F15(M6)/F11 (M6)
Max. Discharge Current	500A (5 sec)
Design Life	12 years (floating charge)
Max. Charging Current	10.0 A
Reference Capacity	C3 38.0AH C5 43.0AH C10 50.0AH C20 51.2AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use 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 ± 5°C
Self Discharge	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 charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions



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	120.4	91.28	52.45	30.07	18.00	12.96	11.00	9.099	6.020	5.089	2.601
1.65V	111.8	86.30	51.58	29.33	17.48	12.85	10.72	9.004	5.971	5.032	2.587
1.70V	102.6	81.16	48.91	28.39	17.01	12.78	10.39	8.828	5.806	5.023	2.575
1.75V	95.09	76.02	46.98	27.50	16.36	12.60	10.11	8.600	5.761	5.010	2.560
1.80V	86.53	69.61	45.24	26.28	15.80	12.50	9.809	8.500	5.666	5.001	2.476
1.85V	67.71	57.60	38.36	23.46	14.45	11.63	9.256	7.824	5.364	4.466	2.450

Constant Power Discharge Characteristics : WPC(25°C)

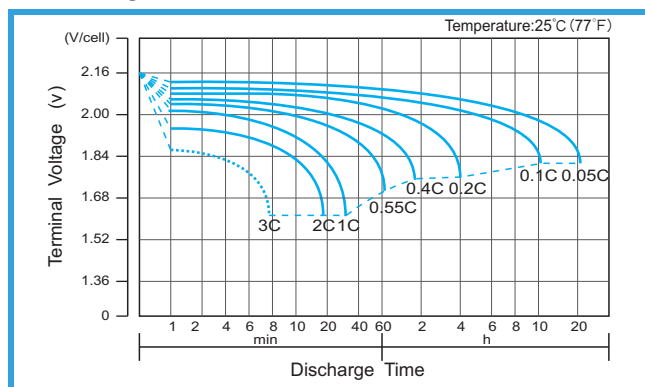
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	206.7	161.0	98.94	57.01	34.19	26.75	21.30	17.79	11.75	9.806	5.173
1.65V	199.1	156.5	96.62	56.03	33.27	26.08	20.78	17.31	11.66	9.711	5.127
1.70V	185.8	148.2	91.97	54.39	32.44	25.08	20.12	16.88	11.51	9.523	5.081
1.75V	172.9	139.8	88.75	52.88	31.29	24.46	19.64	16.49	11.33	9.429	4.989
1.80V	159.3	129.3	85.88	50.72	30.58	24.33	19.27	16.27	11.14	9.334	4.942
1.85V	126.4	108.6	73.66	45.55	28.15	22.69	18.13	15.05	10.53	8.816	4.896

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

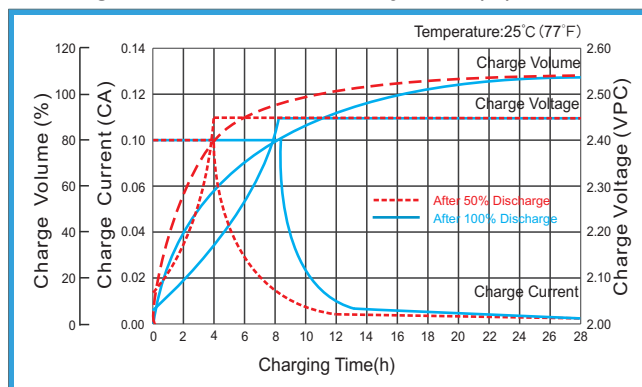
DC12-50 (12v50Ah-10HR)



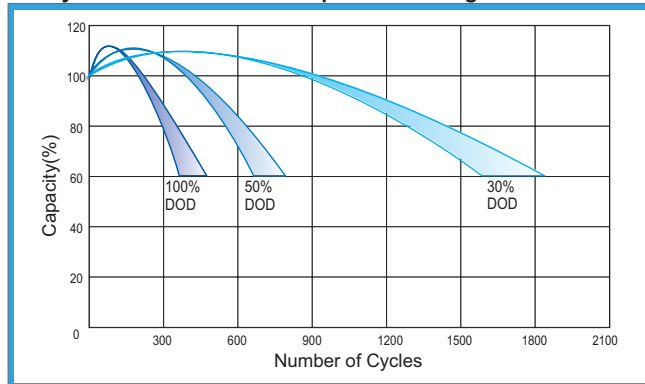
Discharge Characteristics Curve



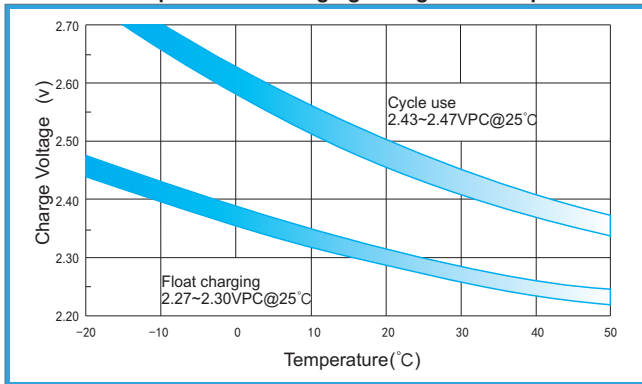
Charge Characteristic Curve for Cycle Use(IU)



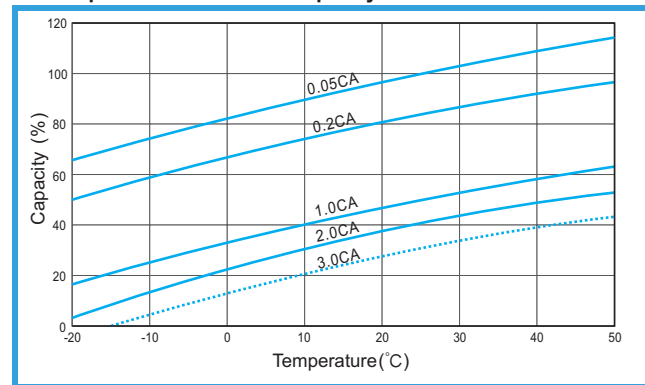
Cycle Life in Relation to Depth of Discharge



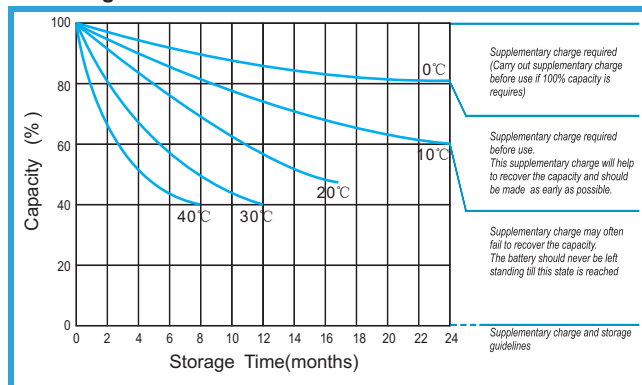
Relationship Between Charging Voltage and Temperature



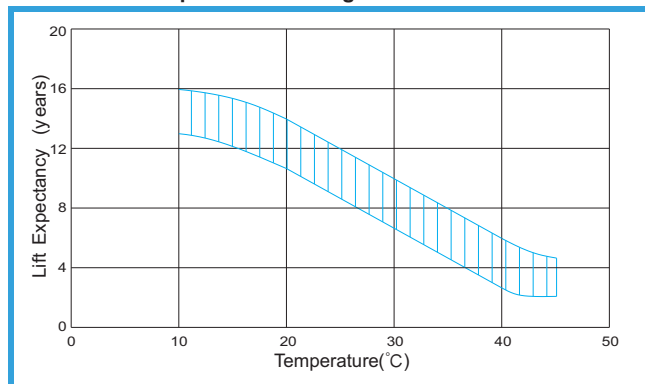
Temperature Effects on Capacity



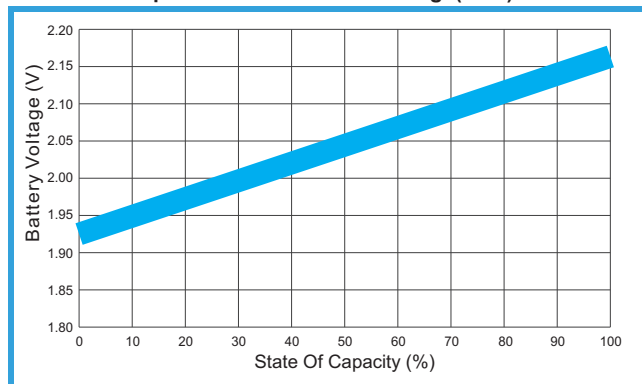
Storage Characteristics



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, AxiWin reserves the right to explain and update the latest information.