



Specification Sheet

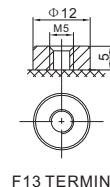
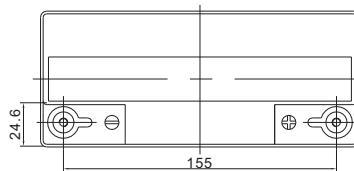
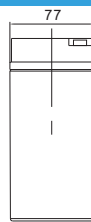
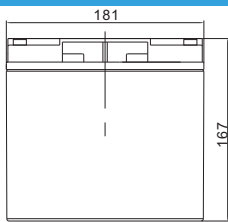
Deep Cycle VRLA Battery

DC12-20 (12V20Ah)

Cells Per Unit	6
Voltage Per Unit	12
	20Ah@20hr-rate to 1.75V per cell @25
Weight	Approx. 5.75 Kg (Tolerance $\pm 3.0\%$)
Internal Resistance	Approx. 15 m Ω
Terminal	F3/L/M5
Max. Discharge Current	200A (5 sec)
Design Life	6~8 years (floating charge)
Max. Charging Current	6.0 A
Reference Capacity	C3 15.03AH C5 17.50AH C10 18.90AH C20 20.08AH
Float Charging Voltage	13.7 V~13.9 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 $\pm 5^\circ\text{C}$
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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions



F13 TERMINAL

Length	181 ± 1.5 mm (7.13 inches)
Width	77 ± 1.5 mm (3.03 inches)
Height	167 ± 1.5 mm (6.57 inches)
Total Height	167 ± 1.5 mm (6.57 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	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	75.89	53.73	38.79	22.27	12.22	7.503	5.600	4.553	3.775	2.428	1.974	1.043
1.65V	70.56	50.68	37.06	21.38	11.80	7.263	5.456	4.430	3.675	2.401	1.948	1.025
1.70V	63.77	46.65	34.71	20.43	11.42	7.024	5.217	4.310	3.579	2.364	1.919	1.012
1.75V	57.04	42.70	32.30	19.53	11.00	6.778	5.024	4.199	3.502	2.331	1.893	1.004
1.80V	50.09	38.66	29.83	18.67	10.58	6.536	4.999	4.079	3.399	2.291	1.890	0.990
1.85V	39.75	31.59	24.76	16.08	9.488	5.988	4.621	3.791	3.170	2.151	1.760	0.940

Constant Power Discharge Characteristics : WPC (25°C)

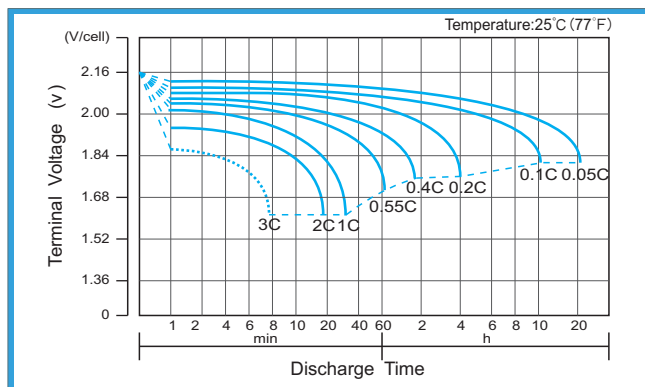
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	125.8	91.16	67.77	40.44	22.96	14.22	10.77	8.742	7.272	4.742	3.877	2.050
1.65V	118.3	87.80	65.75	39.23	22.30	13.83	10.48	8.537	7.110	4.699	3.835	2.021
1.70V	109.2	82.32	62.51	37.88	21.71	13.45	10.24	8.336	6.949	4.637	3.782	1.999
1.75V	100.0	76.71	59.01	36.58	21.04	13.04	9.981	8.154	6.798	4.582	3.737	1.977
1.80V	89.68	70.65	55.26	35.31	20.36	12.64	9.710	7.948	6.646	4.514	3.694	1.960
1.85V	72.68	58.76	46.51	30.72	18.37	11.64	9.016	7.415	6.218	4.247	3.482	1.863

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

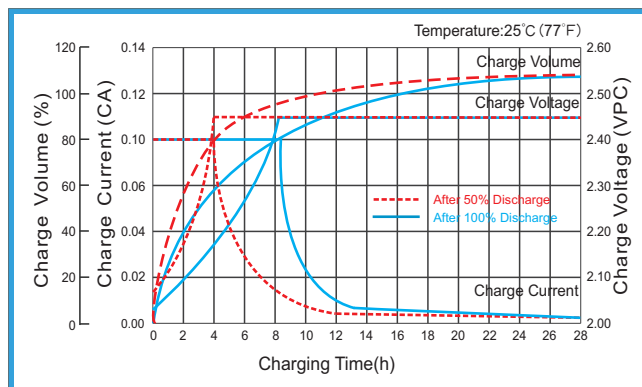
DC12-20 (12v20Ah-20HR)



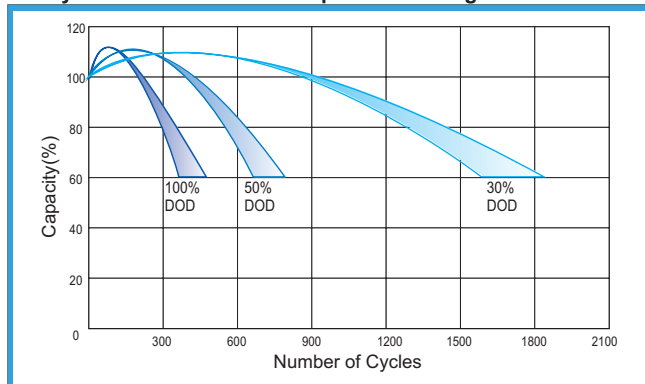
Discharge Characteristics Curve



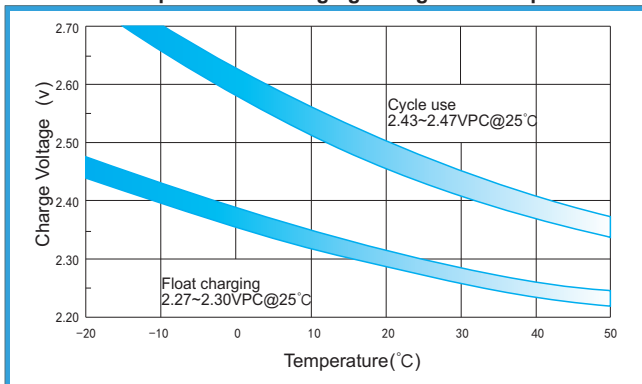
Charge Characteristic Curve for Cycle Use(IU)



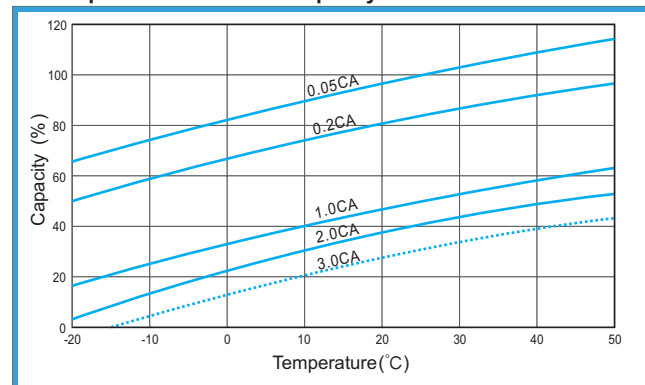
Cycle Life in Relation to Depth of Discharge



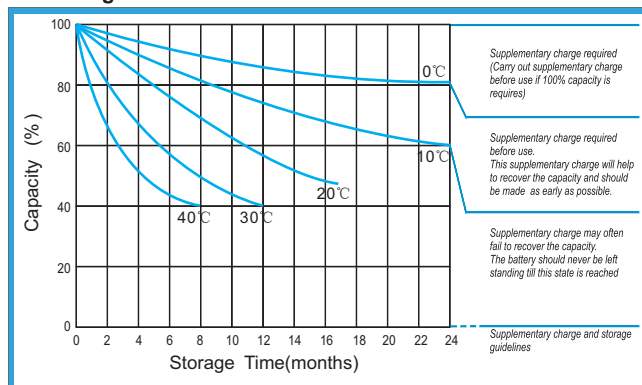
Relationship Between Charging Voltage and Temperature



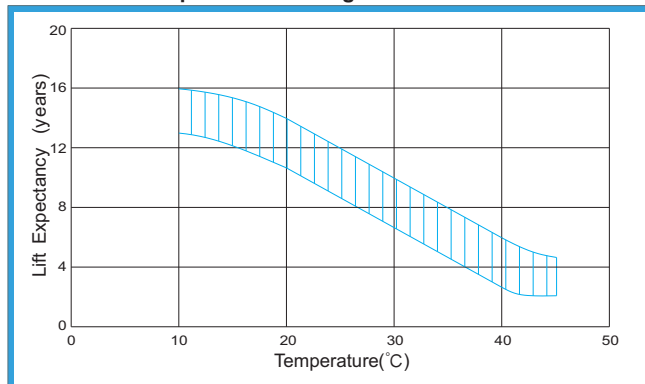
Temperature Effects on Capacity



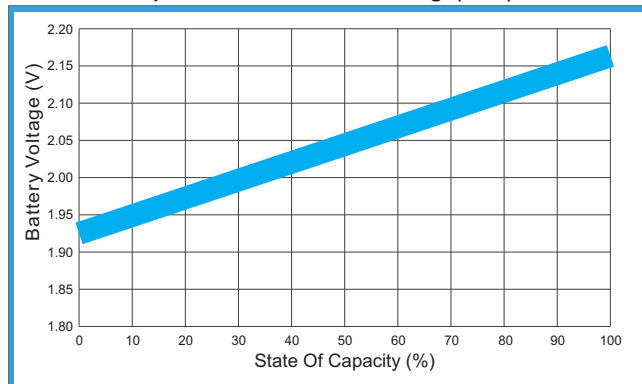
Storage Characteristics



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.