



Specification Sheet

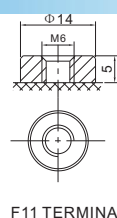
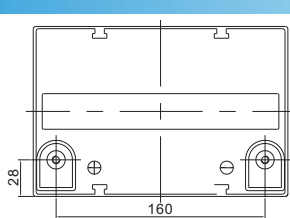
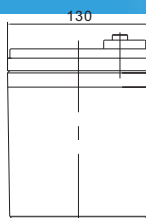
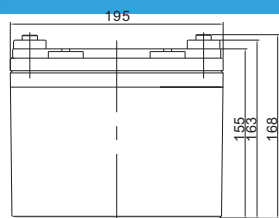
Deep Cycle VRLA Battery

DC12-33 (12V33Ah)

Cells Per Unit	6
Voltage Per Unit	12
	33Ah@10hr-rate to 1.80V per cell @25
Weight	Approx. 10.3 Kg (Tolerance $\pm 3.0\%$)
Internal Resistance	Approx. 8.7 m Ω
Terminal	F7(M8)/F11 (M6)
Max. Discharge Current	330A (5 sec)
Design Life	12 years (floating charge)
Max. Charging Current	6.6 A
Reference Capacity	C3 25.3AH C5 28.64 AH C10 33.3AH C20 34.62AH
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 $\pm 5^\circ\text{C}$
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



Length	195±2mm (7.68 inches)
Width	130±2mm (5.12 inches)
Height	155±2mm (6.10 inches)
Total Height	168±2mm (6.61 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	115.8	81.06	60.43	34.97	20.52	12.30	9.01	7.23	6.09	4.04	3.49	1.82
1.65V	111.6	78.65	58.85	34.20	20.14	12.12	8.82	7.12	6.02	3.99	3.45	1.80
1.70V	106.2	75.48	56.77	33.19	19.64	11.88	8.65	7.04	5.92	3.94	3.41	1.79
1.75V	99.17	71.38	54.06	31.86	18.98	11.56	8.43	6.86	5.73	3.91	3.33	1.73
1.80V	90.36	66.14	50.57	30.14	18.11	11.14	8.16	6.65	5.64	3.82	3.30	1.69
1.85V	79.52	59.59	46.17	27.94	17.00	10.60	7.79	6.37	5.48	3.70	3.16	1.61

Constant Power Discharge Characteristics : WPC (25°C)

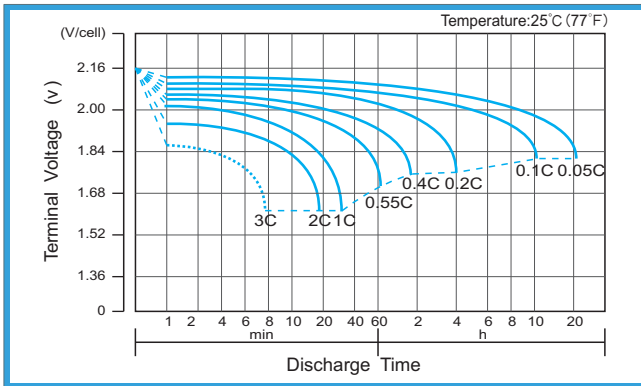
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	199.3	139.9	107.2	64.47	38.95	23.65	17.50	14.29	12.11	8.20	7.02	3.61
1.65V	197.2	139.3	106.6	64.00	38.63	23.48	17.38	14.19	12.03	8.14	6.97	3.58
1.70V	189.7	135.2	103.7	62.45	37.80	23.08	17.11	13.98	11.87	8.04	6.88	3.55
1.75V	180.4	130.1	100.2	60.57	36.71	22.57	16.76	13.72	11.66	7.91	6.77	3.50
1.80V	167.2	122.7	95.09	57.87	35.20	21.87	16.28	13.35	11.37	7.73	6.62	3.44
1.85V	149.8	112.5	88.05	54.18	33.27	20.92	15.63	12.84	10.97	7.49	6.42	3.35

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

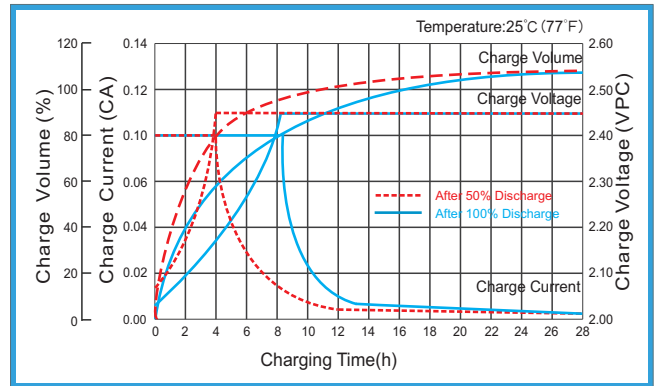
DC12-33 (12v33Ah-10HR)



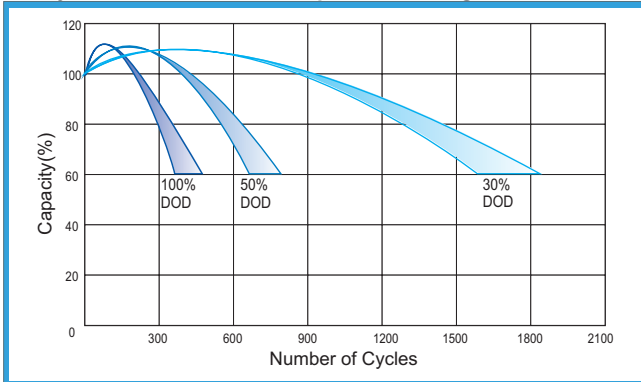
Discharge Characteristics Curve



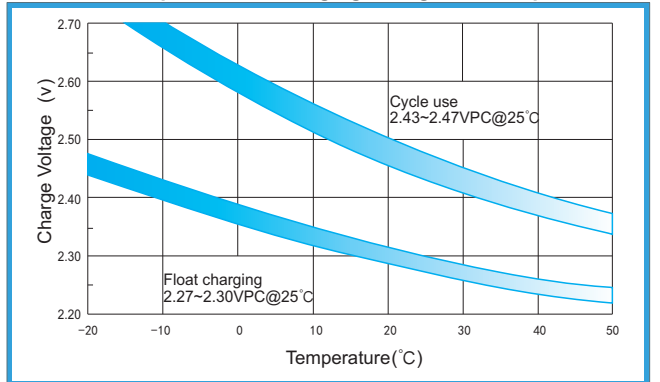
Charge Characteristic Curve for Cycle Use(IU)



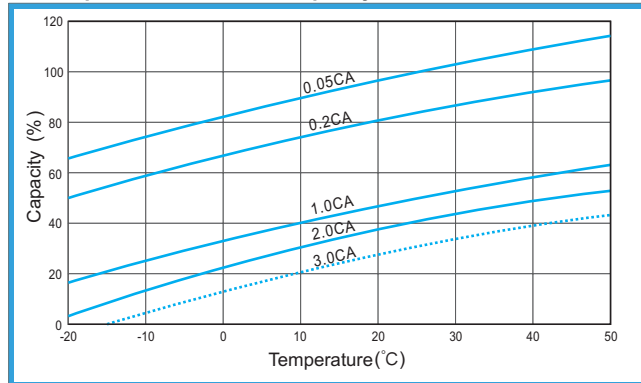
Cycle Life in Relation to Depth of Discharge



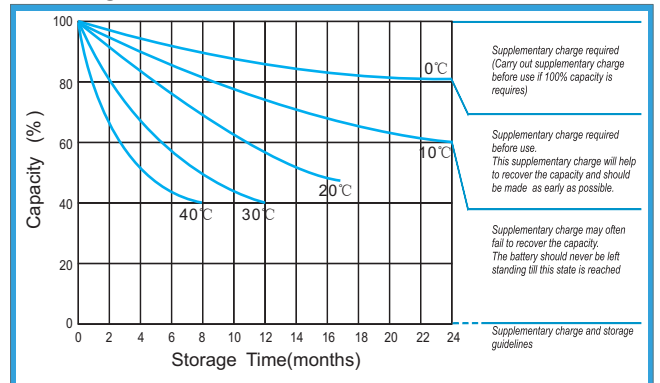
Relationship Between Charging Voltage and Temperature



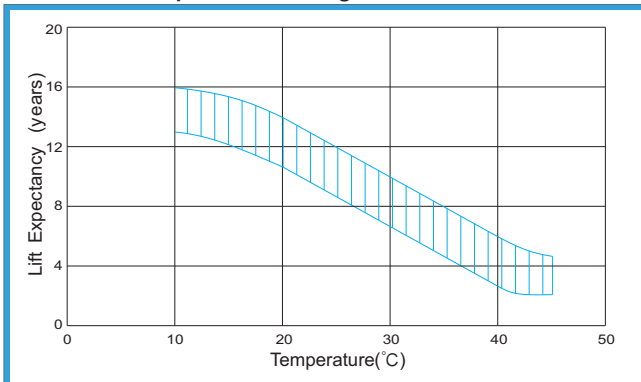
Temperature Effects on Capacity



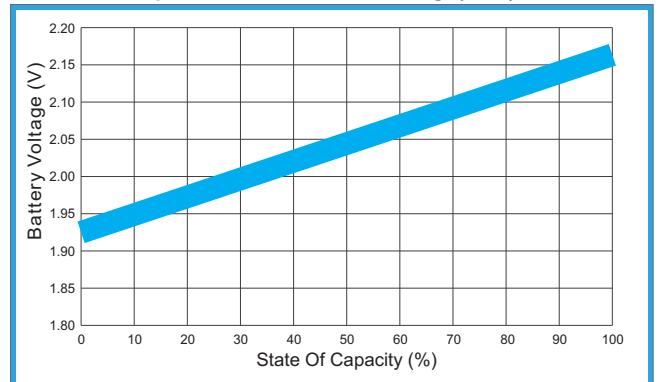
Storage Characteristics



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.