AxiWin

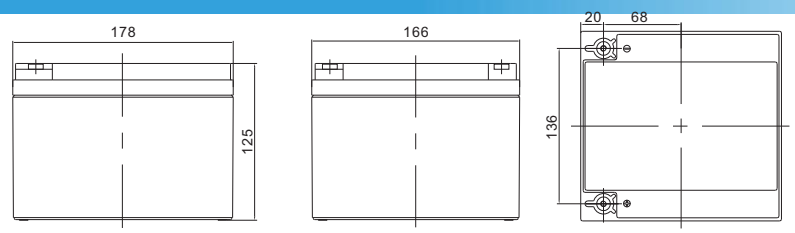
Specification Sheet — General Series

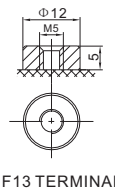
SA12-24 (12V24Ah)

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	24Ah@20hour-rate to 1.75V per cell @25˚C
Weight	Approx. 7.4 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 16 mΩ
Terminal	F13(M5)
Max. Discharge Current	240A (5 sec)
Short Circuit Current	820A
Design Life	6~8 years (Float charging)
Recommended Maximum Charging Current	7.2 A
Reference Capacity	C3 18.48AH C5 20.88AH C10 22.32AH C20 24.00AH
Standby Use 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±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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

UN2800
Non-Spillable battery

Dimensions





F13 TERMINAL

Length	166±1.5mm (6.54 inches)
Width	178±1.5mm (7.00 inches)
Height	125±1.5mm (4.92 inches)
Total Height	125±1.5mm (4.92 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	86.51	61.14	44.19	25.38	13.93	9.003	6.768	5.464	4.527	2.914	2.367	1.250
1.65V	80.44	57.77	42.25	24.37	13.45	8.716	6.559	5.316	4.410	2.881	2.338	1.230
1.70V	72.58	53.19	39.57	23.29	13.01	8.429	6.381	5.172	4.295	2.837	2.302	1.215
1.75V	65.03	48.68	36.83	22.26	12.54	8.134	6.160	5.039	4.176	2.797	2.272	1.200
1.80V	57.10	44.07	34.00	21.28	12.06	7.843	5.999	4.895	4.079	2.750	2.233	1.188
1.85V	45.32	36.02	28.22	18.33	10.82	7.186	5.546	4.549	3.804	2.581	2.112	1.128

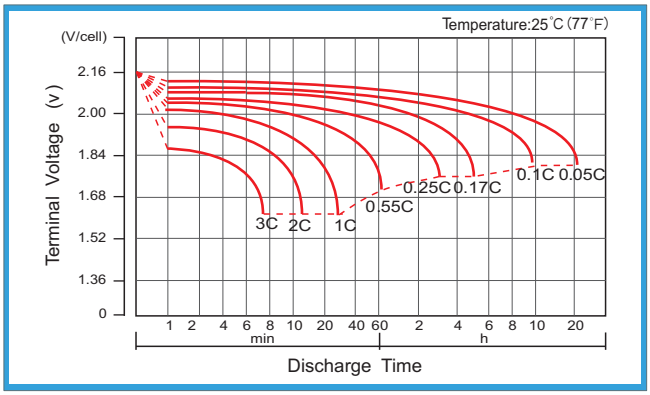
Constant Power Discharge Characteristics : WPC (25˚C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	143.4	103.9	77.26	46.10	26.18	17.06	12.93	10.49	8.727	5.691	4.652	2.460
1.65V	134.9	100.1	74.96	44.73	25.42	16.60	12.58	10.24	8.532	5.638	4.602	2.425
1.70V	124.5	93.84	71.26	43.18	24.75	16.14	12.29	10.00	8.339	5.564	4.538	2.399
1.75V	114.0	87.44	67.27	41.70	23.99	15.65	11.98	9.784	8.157	5.498	4.484	2.372
1.80V	102.2	80.54	63.00	40.26	23.21	15.17	11.65	9.537	7.975	5.417	4.432	2.352
1.85V	82.85	66.99	53.02	35.02	20.94	13.97	10.82	8.899	7.462	5.097	4.179	2.236

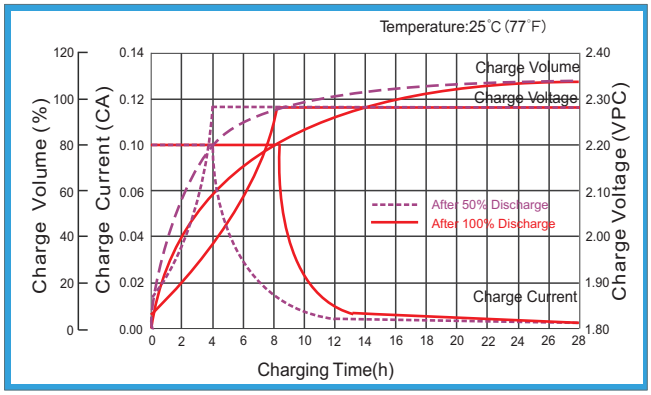
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

SA12-24 (12v24Ah-20HR)

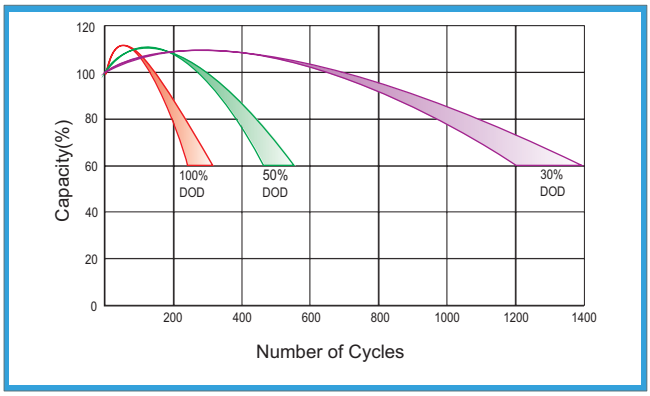
Discharge Characteristics Curve



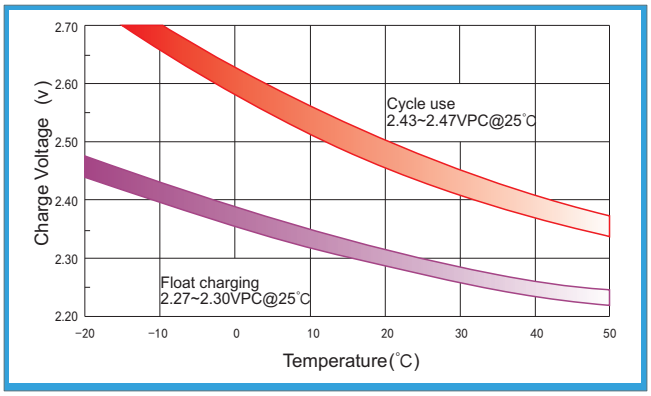
Charge Characteristic Curve For Standby Use



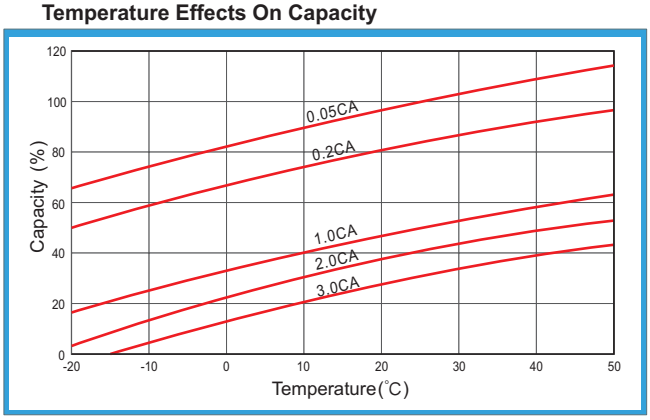
Cycle Life In Relation To Depth Of Discharge



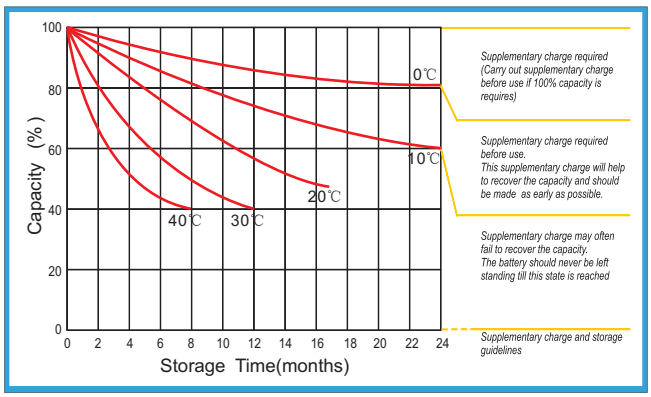
Relationship Between Charging Voltage And Temperature



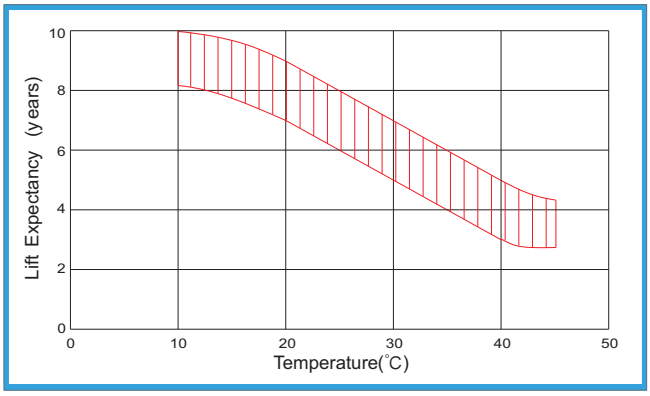
Temperature Effects On Capacity



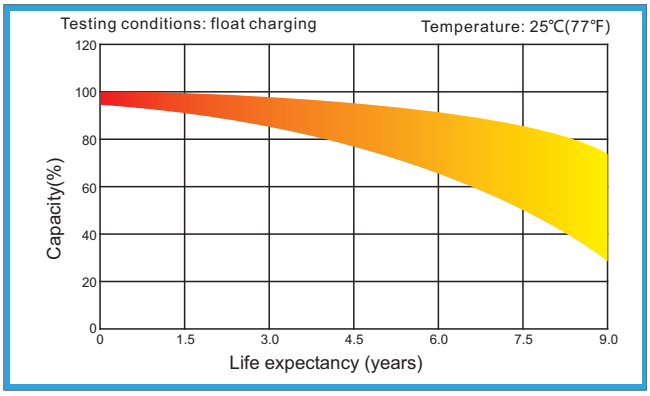
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



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