



S5-6 (6V5.0Ah)

SIGA (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 UPS/EPS etc.



Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	5.0Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 0.75 Kg(Tolerance±5%)
Max. Discharge Current	50 A (5 sec)
Internal Resistance	Approx. 20 mΩ
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
Float charging Voltage	6.85 to 6.95 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	1.5 A
Equalization and Cycle Service	7.3 to 7.4 VDC/unit Average at 25°C
Self Discharge	SIGA Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Faston Tab 187(F1)/Faston tab 250(F2)
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



CERTIFICATE

is in conformity with
ISO 14001:2004 Standard



CERTIFICATE

is in conformity with
OHSAS 18001:1999 Standard

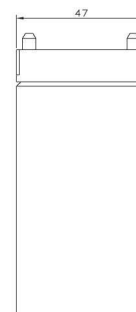
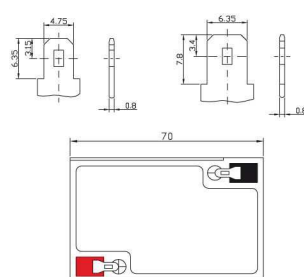
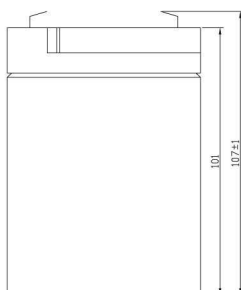
Dimensions

Unit: mm

Dimension: 70(L)×47(W)×107(H)

Terminal F1

Terminal F2



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	19.72	12.93	9.63	5.126	3.250	1.987	1.309	1.067	0.876	0.577	0.500	0.268
5.00V	19.01	12.61	9.32	5.060	3.206	1.947	1.285	1.051	0.869	0.575	0.495	0.265
5.10V	17.89	11.98	9.062	4.983	3.176	1.926	1.274	1.041	0.863	0.570	0.487	0.258
5.25V	16.08	11.20	8.548	4.846	3.137	1.901	1.262	1.025	0.856	0.565	0.485	0.252
5.40V	14.41	10.45	8.065	4.686	3.093	1.886	1.248	0.990	0.852	0.562	0.477	0.242
5.55V	12.61	9.580	7.440	4.508	3.020	1.810	1.223	0.976	0.848	0.558	0.469	0.238

Constant Power Discharge Characteristics : W (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	106.9	70.89	53.13	29.34	19.42	11.71	7.828	6.383	5.250	3.457	2.994	1.605
5.00V	104.2	69.42	52.37	29.03	19.14	11.55	7.700	6.293	5.203	3.443	2.966	1.592
5.10V	99.07	66.67	51.68	28.78	19.00	11.45	7.634	6.234	5.171	3.417	2.928	1.551
5.25V	90.42	63.92	48.99	28.20	18.74	11.33	7.578	6.150	5.130	3.388	2.907	1.525
5.40V	81.58	59.80	46.28	27.53	18.50	11.25	7.489	5.943	5.106	3.374	2.863	1.464
5.55V	71.94	55.67	43.59	26.77	18.09	10.85	7.343	5.857	5.088	3.350	2.820	1.441

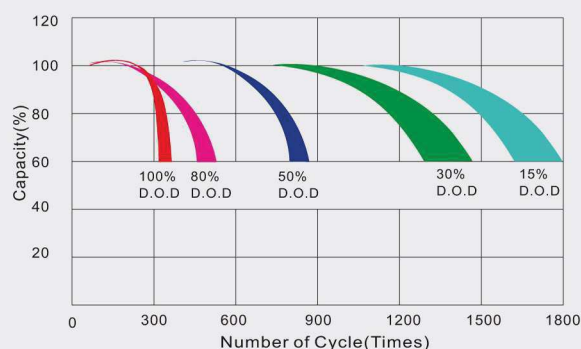
All mentioned values are average values(Tolerance±2%).

S5-6

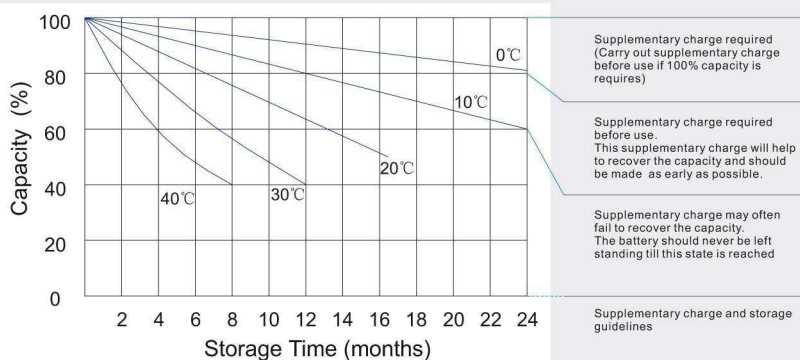
6V5.0Ah



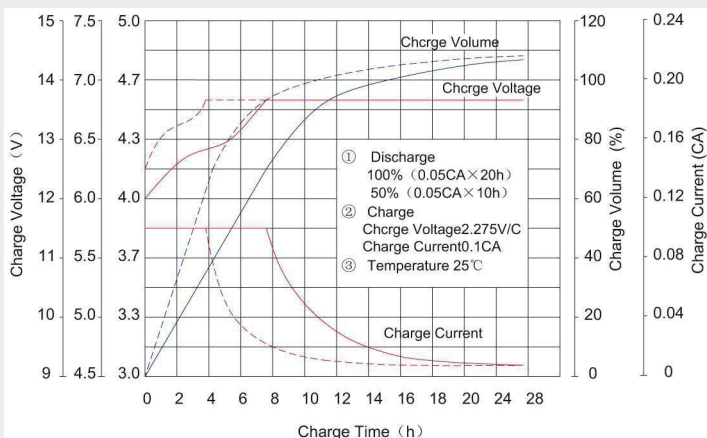
Life characteristics of cyclic use



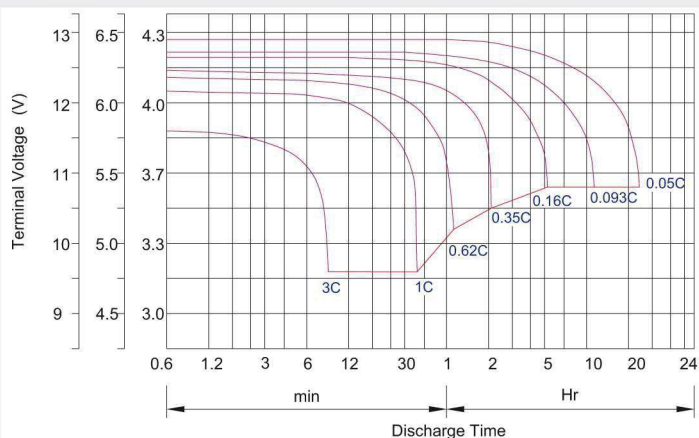
Storage characteristic



Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
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°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4-2.45V/cellx24h, Max. Current 0.3C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.3Cx4h

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

Float Service:
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.