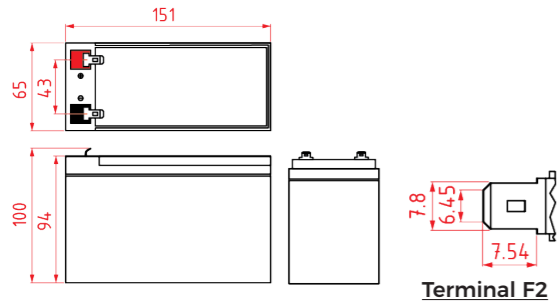


DEEP CYCLE BATTERY



GENERAL FEATURES

- High corrosion resistant performance : Pb-Ca multy alloy grid
- High energy density and power density
- Optimized capability of instant high-current discharging
- Excellent charge acceptance ability
- Excellent deep cycle discharge capability
- Strong high and low temperature performance
- Precision sealing technology

APPLICATIONS

- UPS/EPS
- Power systems
- Telecommunications system
- Emergency lighting, Auto control system
- Solar/wind generating storage cyclic
- Kids Toys
- Other general purpose

SPECIFICATION

Nominal voltage	12V
Nominal capacity	7.0Ah
Terminal	F2
Dimension (LxWxHxTH)	151 x 65 x 94 x 100 mm
Weight	2.0kg (Approx.)
Container material	ABS
Rated capacity	7.00Ah (20 hour rate) 5.52Ah (3 hour rate) 4.62Ah (1H hour rate)
Internal resistance	42.0 mΩ (Full charge at 25°C)
Max. discharge current	105A (5S)
Operating temperature	Discharge : -20~50°C Charge : -20~50°C Storage : -20~50°C
Charge methode (25°C)	Charge current : Max. 1.75A, recommended 0.70A Standby use : 13.5~13.8V, recommended 13.8V Equalize charge : 13.8~14.1V, recommended 14.1V Cycle use : 14.4~15.0V, recommended 14.7V
Self discharge	3% capacity decline per month at 25°C

Constant Current Discharge Characteristics (Unit : A, at 25°C)

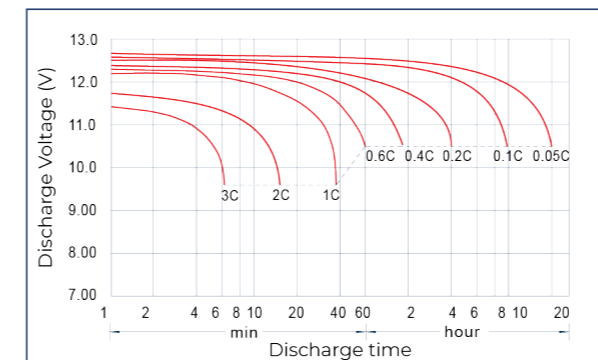
FV/ Time	5 min.	10 min.	15 min.	30 min.	45 min.	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.60V	27.7	18.1	13.5	8.86	5.67	4.62	2.82	2.65	1.93	1.55	1.32	0.999	0.868	0.693	0.371
1.65V	27.5	17.4	12.4	8.41	5.32	4.34	2.79	2.54	1.88	1.50	1.29	0.989	0.854	0.686	0.364
1.70V	22.5	16.3	11.6	8.15	5.15	4.20	2.73	2.49	1.84	1.42	1.27	0.969	0.840	0.672	0.357
1.75V	20.9	15.5	10.8	7.96	4.97	4.05	2.68	2.43	1.811	1.40	1.22	0.949	0.819	0.658	0.350
1.80V	19.3	14.6	10.0	7.70	4.80	3.91	2.62	2.37	1.72	1.37	1.17	0.928	0.798	0.644	0.336
1.85V	17.2	13.5	8.89	7.05	4.44	3.62	2.54	2.25	1.62	1.33	1.12	0.901	0.765	0.628	0.330

Constant Power Discharge Characteristics (Unit : W/Cell, at 25°C)

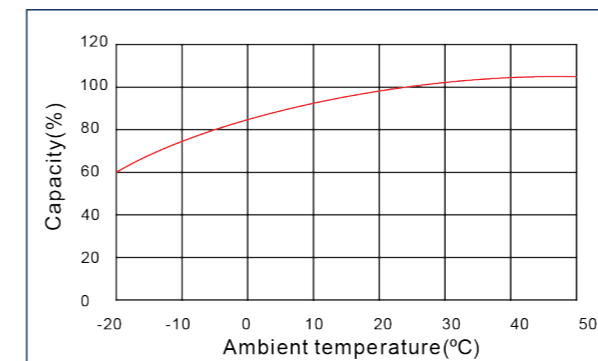
FV/ Time	5 min.	10 min.	15 min.	30 min.	45 min.	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.60V	52.0	32.7	24.7	15.0	10.2	8.47	5.65	4.96	3.65	2.93	2.49	1.97	1.64	1.34	0.735
1.65V	48.0	30.9	23.2	14.9	9.56	7.97	5.57	4.77	3.55	2.84	2.44	1.94	1.61	1.32	0.715
1.70V	43.9	30.0	22.2	14.8	9.26	7.72	5.53	4.68	3.49	2.70	2.37	1.92	1.60	1.31	0.709
1.75V	39.8	29.1	21.4	14.7	9.00	7.50	5.40	4.57	3.44	2.66	2.32	1.88	1.53	1.28	0.694
1.80V	35.7	28.1	20.4	14.5	8.88	7.40	5.28	4.57	3.35	2.64	2.26	1.83	1.48	1.25	0.690
1.85V	31.9	26.3	18.3	13.3	8.30	6.92	5.19	4.54	3.19	2.60	2.16	1.80	1.42	1.23	0.683

Disclaimer : Manufacturers have the right to self-modify the parameters of the product updates. Please refer to aki.incoe-astra.com for any updates

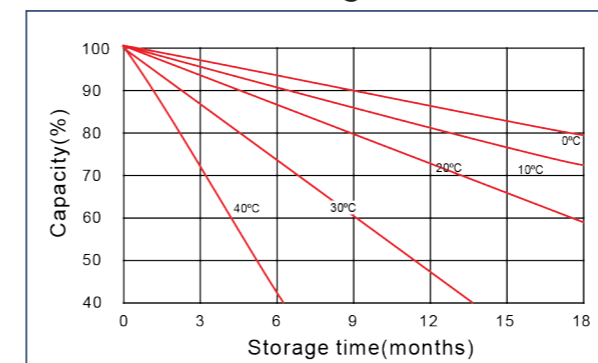
Discharge Characteristic



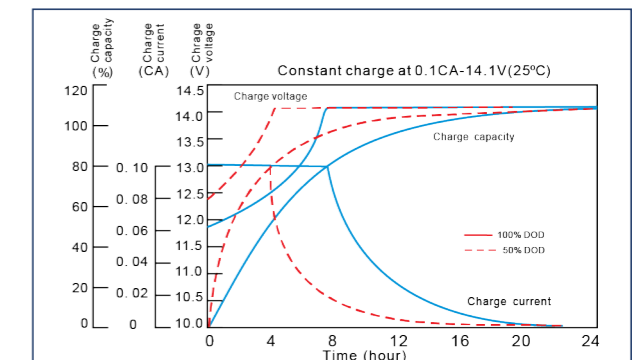
The effect of temperature on capacity



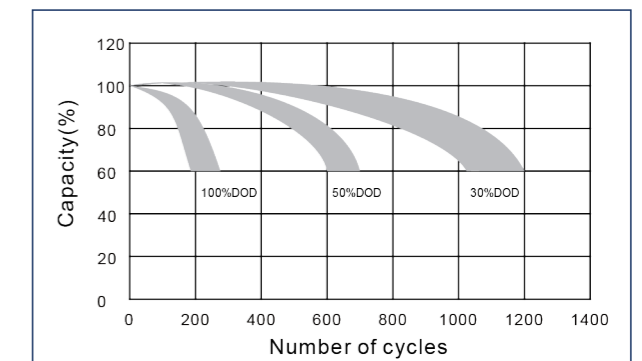
Curves of self-discharge



Charging Characteristic



The effect of discharge depth on cycle life



The effect of temperature on float life

