

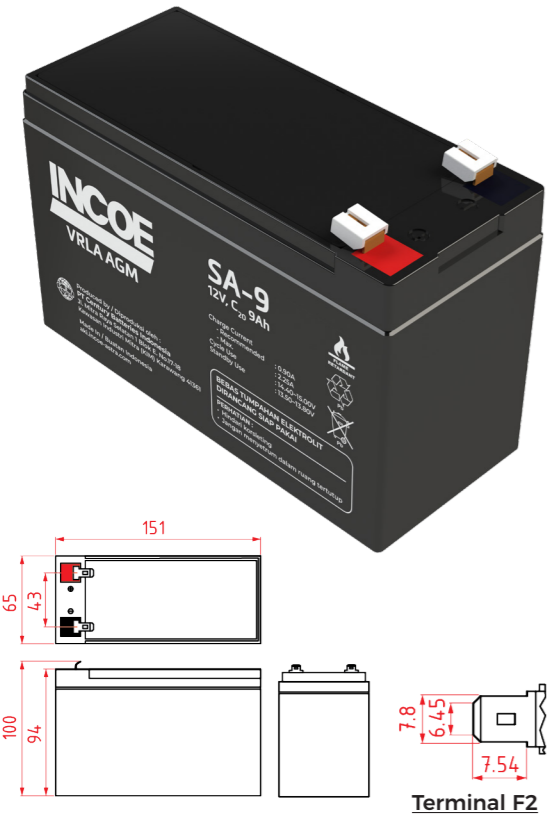
DEEP CYCLE BATTERY

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	9.0Ah
Terminal	F2
Dimension (LxWxHxTH)	151 x 65 x 94 x 100 mm
Weight	2.53kg (Approx.)
Container material	ABS
Rated capacity	9.00Ah (20 hour rate) 7.11Ah (3 hour rate) 6.77Ah (1H hour rate)
Internal resistance	25.0 mΩ (Full charge at 25°C)
Max. discharge current	135A (5S)
Operating temperature	Discharge : -20~50°C Charge : -20~50°C Storage : -20~50°C
Charge methode (25°C)	Charge current : Max. 2.25A, recommended 0.90A 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



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

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

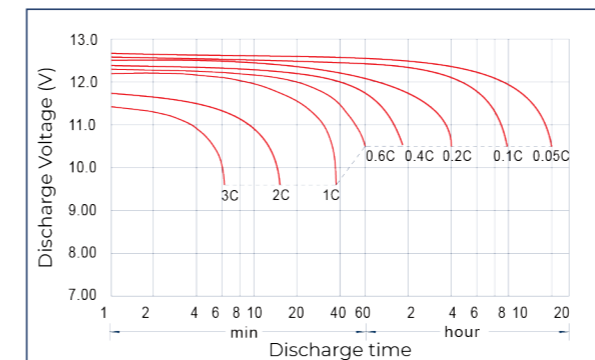
FV/ Time	5 min.	10 min.	15 min.	30 min.	45 min.	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.60V	37.2	25.2	21.0	10.2	8.30	6.77	3.62	3.40	2.52	1.99	1.69	1.28	1.12	0.890	0.477
1.65V	34.0	23.9	19.2	10.1	7.70	6.28	3.55	3.27	2.41	1.93	1.66	1.26	1.10	0.872	0.468
1.70V	30.9	22.7	17.8	9.90	7.56	6.16	3.50	3.20	2.37	1.83	1.63	1.24	1.08	0.861	0.459
1.75V	28.2	21.6	16.6	9.80	7.29	5.94	3.41	3.12	2.33	1.80	1.56	1.21	1.05	0.838	0.450
1.80V	25.0	20.5	15.5	9.60	7.03	5.73	3.37	3.04	2.21	1.76	1.50	1.19	1.03	0.828	0.432
1.85V	22.3	19.0	13.8	8.80	6.51	5.31	3.27	2.89	2.08	1.71	1.43	1.16	0.987	0.803	0.425

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

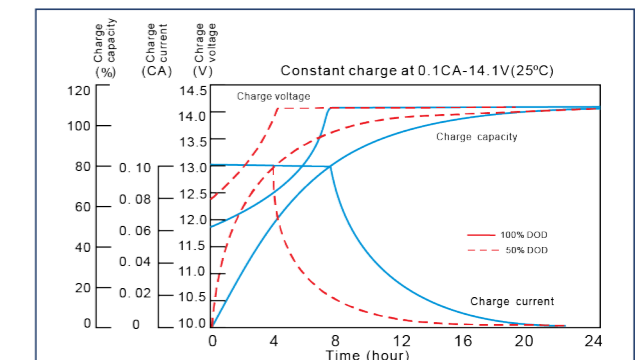
FV/ Time	5 min.	10 min.	15 min.	30 min.	45 min.	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.60V	66.9	45.4	38.0	18.6	13.0	10.8	7.26	6.23	4.63	3.68	3.16	2.52	2.11	1.72	0.945
1.65V	62.0	43.4	35.1	18.5	12.1	10.1	7.13	6.05	4.48	3.63	3.14	2.48	2.08	1.69	0.920
1.70V	56.4	41.7	33.0	18.4	11.9	9.90	7.09	6.02	4.46	3.47	3.10	2.46	2.05	1.68	0.912
1.75V	52.2	40.0	31.0	18.3	11.6	9.70	6.92	5.91	4.43	3.44	2.99	2.41	2.03	1.64	0.898
1.80V	46.8	38.6	29.1	18.1	11.4	9.50	6.88	5.78	4.24	3.39	2.91	2.39	2.01	1.63	0.887
1.85V	41.8	36.1	26.0	16.6	10.7	8.88	6.77	5.52	4.04	3.34	2.78	2.35	1.92	1.60	0.879

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

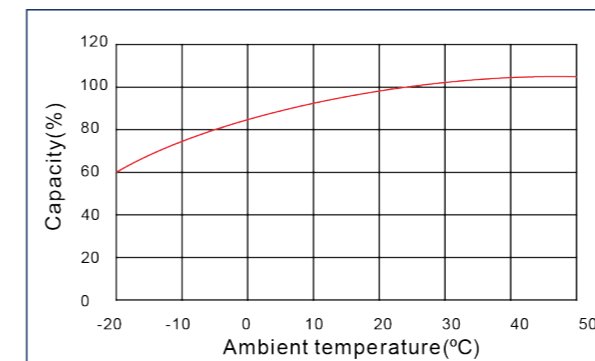
Discharge Characteristic



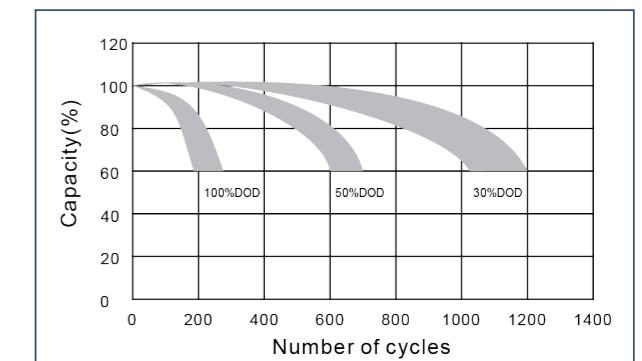
Charging Characteristic



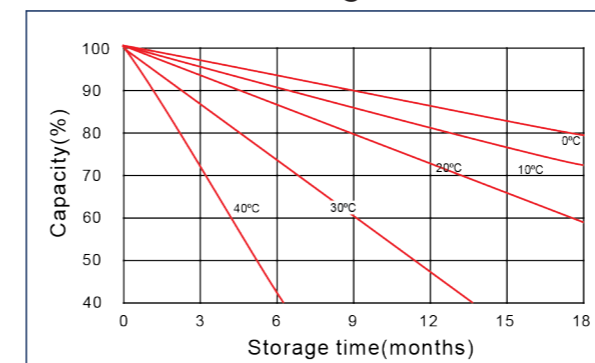
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

