

DEEP CYCLE BATTERY

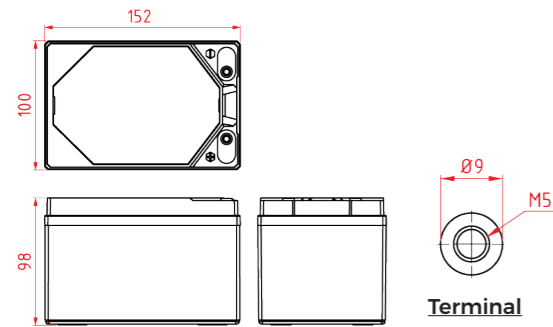


APPLICATIONS

- E-bike
- E-toys
- Other general purpose

SPECIFICATION

Nominal voltage	12V
Nominal capacity	12.0Ah
Terminal	M5
Dimension (LxWxH)	152 x 100 x 98 mm
Weight	3.8kg (Approx.)
Container material	ABS
Rated capacity	12.00Ah (20 hour rate)
	10.26Ah (3 hour rate)
	8.52Ah (1H hour rate)
Internal resistance	24.0 mΩ (Full charge at 25°C)
Max. discharge current	180A (5s)
Operating temperature	Discharge : -20~50°C
	Charge : -20~50°C
	Storage : -20~50°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)

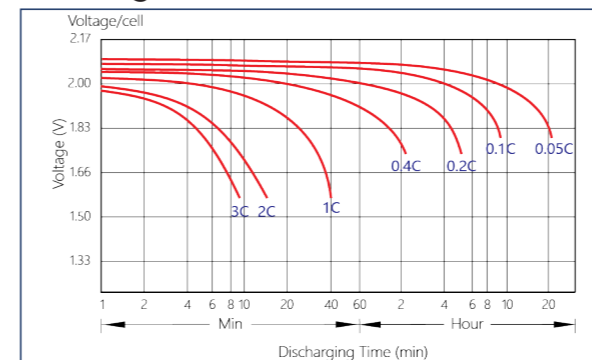
FV/ Time	30 min.	45 min.	1 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.85V/cell	14.174	17.185	8.287	4.636	3.364	2.664	2.199	1.864	1.428	1.161	0.598
1.80V/cell	14.463	17.514	8.420	4.686	3.402	2.684	2.213	1.875	1.435	1.166	0.599
1.75V/cell	14.721	17.761	8.523	4.737	3.425	2.698	2.224	1.884	1.440	1.170	0.600
1.70V/cell	14.984	18.012	8.626	4.789	3.448	2.713	2.235	1.894	1.446	1.174	0.601
1.65V/cell	15.103	18.143	8.690	4.823	3.467	2.723	2.242	1.899	1.449	1.175	0.602
1.60V/cell	15.215	18.203	8.721	4.843	3.481	2.731	2.246	1.902	1.452	1.176	0.602

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

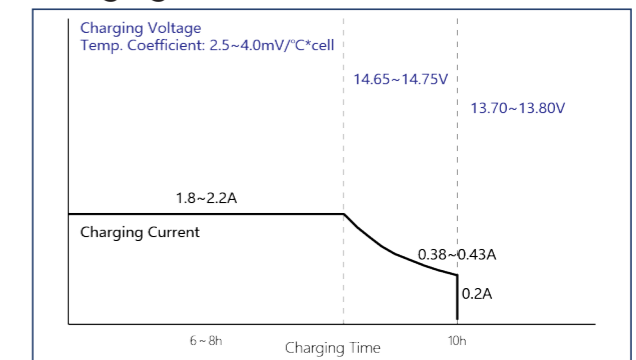
FV/ Time	30 min.	45 min.	1 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.85V/cell	27.924	34.069	16.485	41.722	6.732	5.334	4.402	3.732	2.859	2.324	1.196
1.80V/cell	28.464	34.716	16.745	9.358	6.806	5.370	4.428	3.751	2.872	2.332	1.199
1.75V/cell	28.966	35.188	16.934	9.454	6.846	5.394	4.445	3.768	2.880	2.339	1.199
1.70V/cell	29.451	35.654	17.141	9.549	6.885	5.417	4.463	3.781	2.886	2.344	1.200
1.65V/cell	29.658	35.869	17.252	9.605	6.912	5.429	4.470	3.787	2.891	2.347	1.201
1.60V/cell	29.809	35.928	17.292	9.637	6.929	5.439	4.474	3.789	2.894	2.347	1.202

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

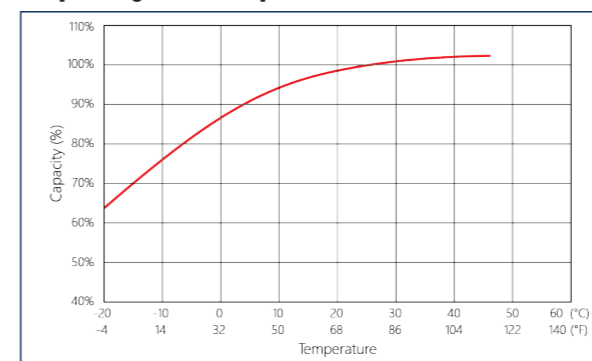
Discharge Characteristic (25°C)



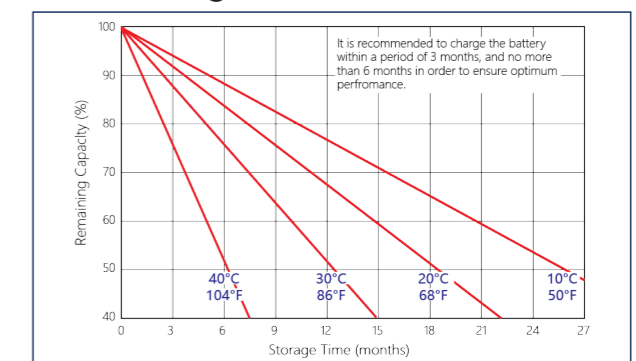
Charging Characteristic (25°C)



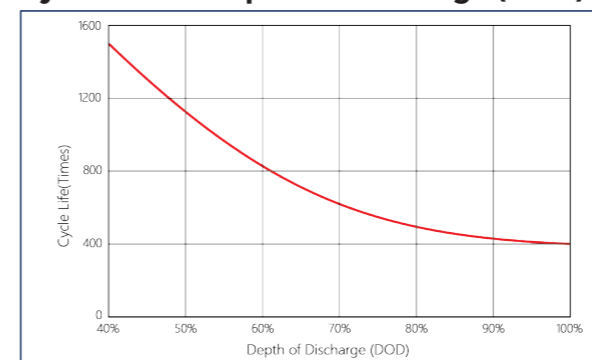
Capacity vs Temperature



Self Discharge vs Time



Cycle Life vs Depth of Discharge (25°C)



Cycle Life vs Remaining Capacity (25°C)

