

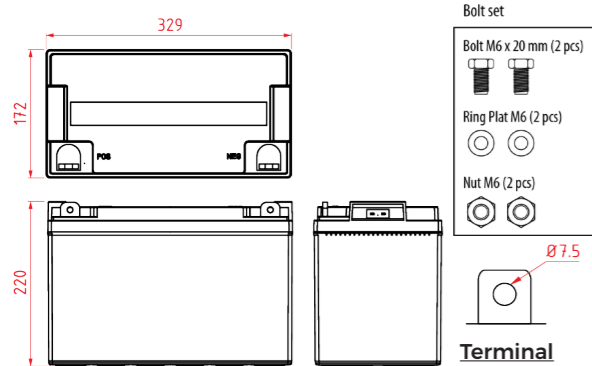
### DEEP CYCLE BATTERY

#### APPLICATIONS

- Solar Panel
- UPS/EPS
- CCTV
- Road Lighting
- AGV (Automated Guided Vehicle)
- Boat navigation
- Other general purpose

#### SPECIFICATION

Nominal voltage	12V
Nominal capacity	100Ah
Terminal	Bolt-Nut M6x20
Dimension (LxWxH)	329 x 172 x 220 mm
Weight	31,5 kg (Approx.)
Container material	ABS
Rated capacity	100Ah (10 hour rate) 81.9 Ah (3 hour rate) 67.3Ah (1H hour rate)
Internal resistance	6.0 mΩ (Full charge at 25°C)
Max. discharge current	1200A (5s)
Operating temperature	Discharge : -20~50°C Charge : -20~50°C Storage : -20~50°C
Charge methode (25°C)	Charge current : Max. 25A, recommended 6.5A Standby use : 13.6~13.8V, recommended 13.8V Equalize charge : 13.8-14.1V, recommended 14.1V Cycle use : 14.6~14.8V, recommended 14.8V
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

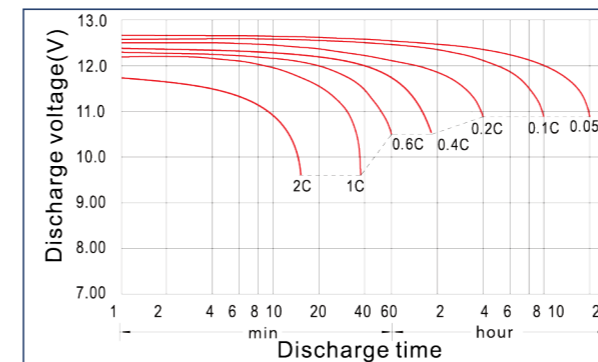
#### Constant Current Discharge Characteristics (Unit : A, at 25°C)

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	352	234	189	115	82.6	67.3	42.3	38.6	28.0	20.3	18.8	15.0	12.4	10.4	5.46
1.65V	342	233	184	113	82.1	66.9	41.9	38.4	27.7	20.1	18.6	14.8	12.3	10.3	5.43
1.70V	328	231	180	111	81.5	66.4	41.5	38.1	27.3	19.9	18.4	14.7	12.2	10.2	5.40
1.75V	302	228	174	110	80.3	65.5	41.1	37.5	27.0	19.7	18.2	14.6	12.1	10.1	5.38
1.80V	270	222	162	105	78.3	63.8	40.7	36.8	26.9	19.5	17.7	14.4	12.0	10.0	5.35
1.85V	241	206	144	96.2	72.5	59.1	39.4	35.0	25.3	18.9	16.9	14.0	11.5	9.70	5.26

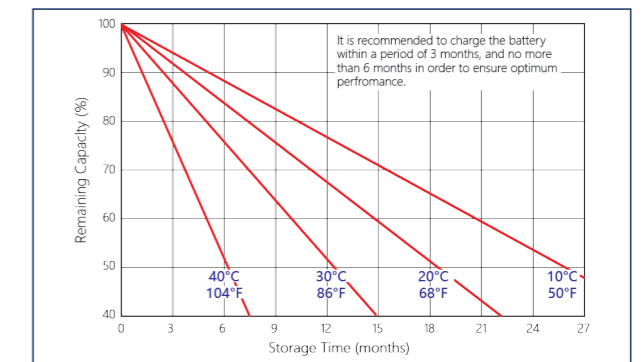
FV/ Time	5 min.	10 min.	15 min.	30 min.	45 min.	1 hour	1.5 hour	2 hour	3 hour	4 hour	5 hour	6 hour	8 hour	10 hour	20 hour
1.60V	591	396	333	208	152	127	84.4	73.0	53.3	40.0	35.7	29.3	24.0	20.0	10.8
1.65V	568	393	328	206	151	126	83.6	72.8	52.6	39.6	35.5	29.0	23.8	19.9	10.8
1.70V	565	390	324	206	150	125	82.7	72.5	52.3	39.2	35.2	28.7	23.7	19.6	10.8
1.75V	527	387	322	205	149	124	81.9	72.1	52.0	38.8	35.0	28.5	23.5	19.4	10.7
1.80V	484	384	304	201	148	123	81.0	71.9	51.8	38.4	34.6	28.2	23.3	19.2	10.6
1.85V	432	359	272	184	138	115	79.8	68.7	49.3	37.8	33.0	27.7	22.5	18.9	10.5

**Disclaimer :** Manufacturers have the right to self-modify the parameters of the product updates. Please refer to [aki.incoe-astra.com](http://aki.incoe-astra.com) for any updates

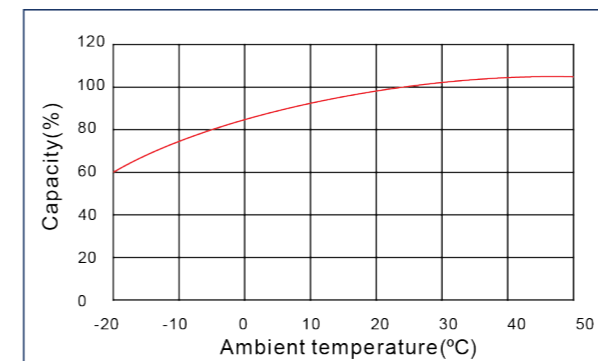
#### Discharge Characteristic



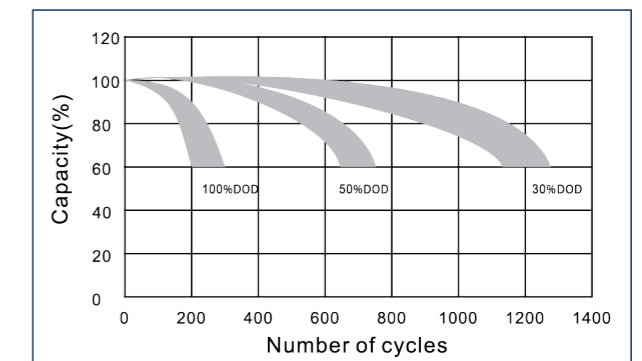
#### Charging Characteristic



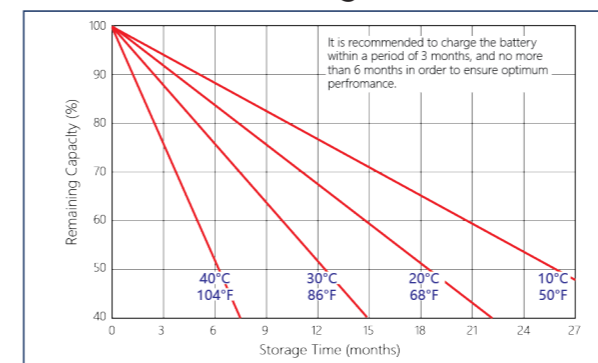
#### The effect of temperature on capacity



#### The effect of discharge depth on cycle life



#### Curves of self-discharge



#### The effect of temperature on float life

