

# EXC

## Extreme Cyclic Battery

### EXC-300



### Main Applications

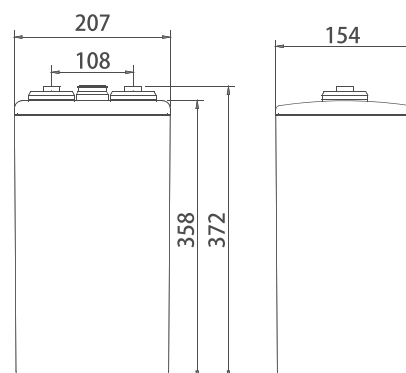
- ▣ Renewable energy (wind & solar ) storage system
- ▣ Peak shifting of electrical power system
- ▣ Frequency regulation and load following service
- ▣ Smart-grid & micro-grid sites
- ▣ All extreme environment (off-grid & bad-grid sites)

### Benefits

- ▣ Designing life is long which can help user reduce a lot of operating cost
- ▣ Ultra-high cycling performance in both PSoC and deep cycling
- ▣ Super fast charging performance, reducing charging time by 50%
- ▣ Less storage cost per kW-h



### Dimensions



### Technical Parameters

Nominal Voltage	2 V
Capacity	300 Ah @ 10hr to 1.80 V @ 25°C (77°F)
Weight	28.3 kg (62.4 lbs)
Dimensions	Length: 154 mm (6.06 in) Width: 207 mm (8.15 in) Height: 358 mm (14.09 in) Total height: 372 mm (14.65 in)
Internal Resistance (full charged)	0.28 mΩ
Short- circuit Current	6400 A
Self Discharge @25°C(77°F)	Less than 7% after 90 days
Operating Temperature Range	Discharge: -20°C ~ 45°C(-4°F ~ 113°F) Charge: -20°C ~ 45°C(-4°F ~ 113°F) Storage: -20°C ~ 45°C(-4°F ~ 113°F)
Recommended Operating Temperature	15°C ~ 30°C (59°F ~ 86°F)
Recommended Charging Current	60 A
Maximum Charging Current	105 A
Charging Voltage @25°C(77°F)	Equalize: 2.35 V/cell Temperature Compensation Factor of Battery: -3mV/(cell·C)
Terminal	M8
Container Materials	ABS/ABS V0 (Optional)
Capacity Affected by Temperature(C <sub>10</sub> )	110% @ 40°C ( 104 °F ) 90% @ 0°C ( 32 °F ) 65% @ -20°C ( -4 °F )

### Certification

- ☑ ISO9001  
(NO.03009Q10083R2M)
- ☑ ISO14001  
(NO.03010E10145R0M)
- ☑ GB/T28001  
(NO.03010S10141 R0M)

### Technical Features

- ▣ Adopt lead- carbon capacitance technology, reducing sulphation of the cathode, ideal for PSoC cycle application and delivering 7~8 times cyclic life compared with normal VRLA
- ▣ Exceptional fast charging acceptability
- ▣ Distinctive design for premium quality, high reliability and stability

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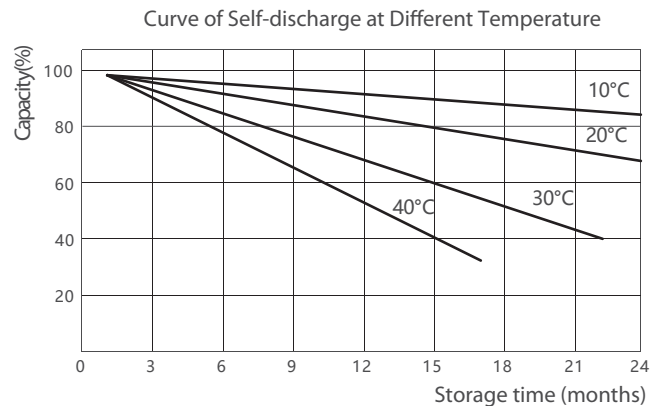
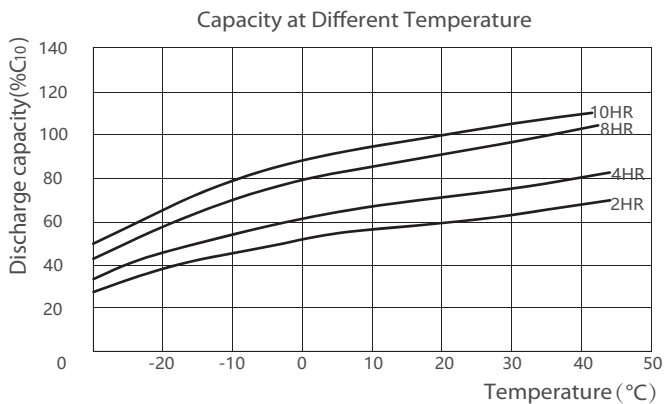
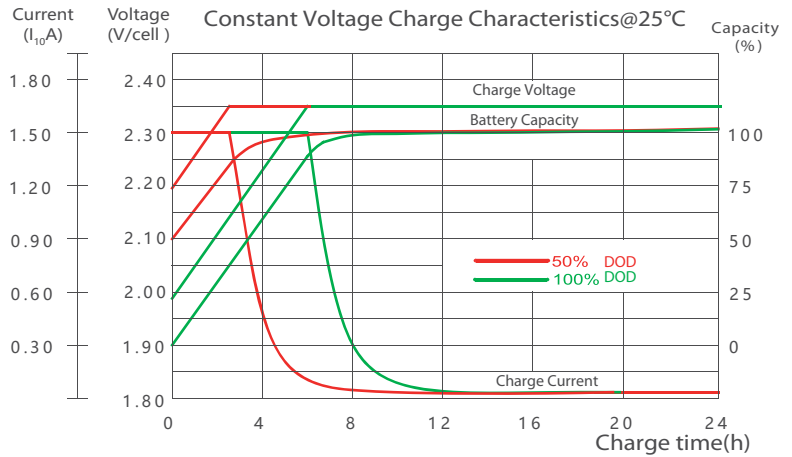
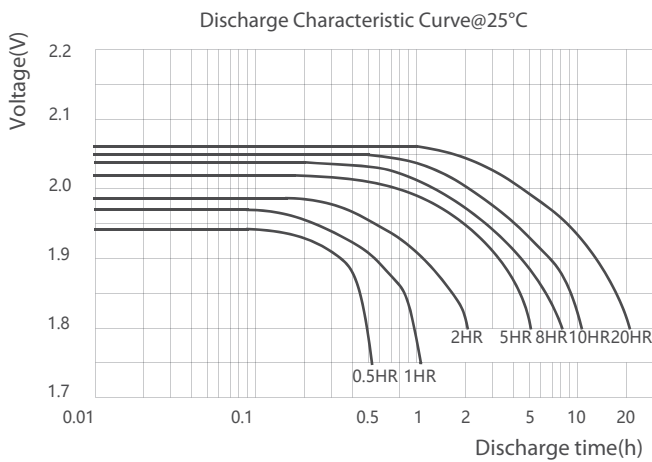
### Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	423	299	198	84	59	41	35	18.8	7.9
1.80V	397	283	180	81	57	40	34	18.5	7.6
1.85V	317	235	162	77	54	39	31	17.9	7.4
1.90V	256	204	131	65	50	36	29	16.3	7.2

### Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	768	554	355	172	111	79	67	36.3	16.2
1.80V	708	512	340	166	108	77	66	34.5	15.9
1.85V	604	464	311	158	107	74	64	33.1	15.4
1.90V	500	383	265	135	96	70	58	31.7	14.0

### Performance Curve



#### \*Declaration:

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