

Extreme cyclic Battery

EXC-600



power the future



• 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

- Extra long life design, design life is 25 years, help user reduce greatly operating cost
- Ultra-high cycling performance in both PSoC and deep cycling applications
- Super quick charge performance, reduce charging time by 50%
- More cost effective than nearest equivalent when used in energy storage system

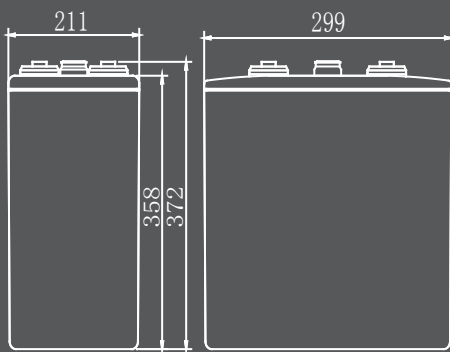
• Technical Features

- Comply with GB/T 22473·BS EN61427-1: 2013·IEC61427-2: 2015 standards, etc
- Adopt lead carbon technology, reduce the cathode sulphation, ideal for PSoC cycle application and can deliver 7~8 times better cyclic life compared with normal VRLA
- Exceptional fast charge acceptability
- Distinctive design for premium quality, high reliability and stability

• Technical Parameters

Normal Voltage	2V
Capacity	600 Ah @10hr to 1.80V per cell @ 25°C(77°F)
Weight	56.6 kg (124.8 lbs)
Dimensions	Length: 299 mm (11.77 in) Width: 211 mm (8.31 in) Height: 358 mm (14.09 in) Total height: 372 mm (14.65 in)
Internal Resistance (full charged)	0.24mΩ (According to IEC 60896-21)
Short- circuit current	8300A (According to IEC 60896-21)
Self Discharge @ 25°C(77°F)	Less than 4 % after 30 days storage
Operating Temperature Range	Discharge: -40°C ~ 50°C(-40°F ~ 122°F) Charge: -20°C ~ 50°C(-4°F ~ 122°F) Storage: -20°C ~ 40°C(-4°F ~ 104°F)
Recommended Operating Temperature	15°C ~ 25°C(59°F ~ 77°F)
Recommended Charging Current	120A
Charging Voltage @25°C(77°F)	2.30~2.35 V/cell
Terminal	M8
Capacity Affected by Temperature(C ₁₀)	105 % @ 40°C 90 % @ 0°C 40 % @ -20°C
Design life @25°C(77°F)	25 years

• Dimensions :



• Compliant standards :

- ★ GB/T 22473-2008
- ★ BS EN 61427-1: 2013
- ★ IEC 61427-2: 2015
- ★ IEC 60896-21/22

• Attain certificate :

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

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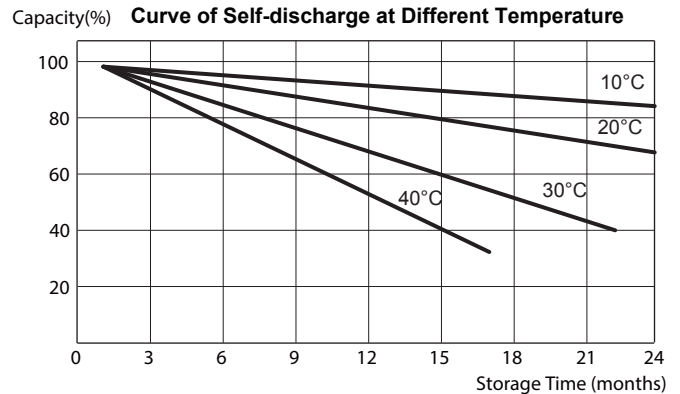
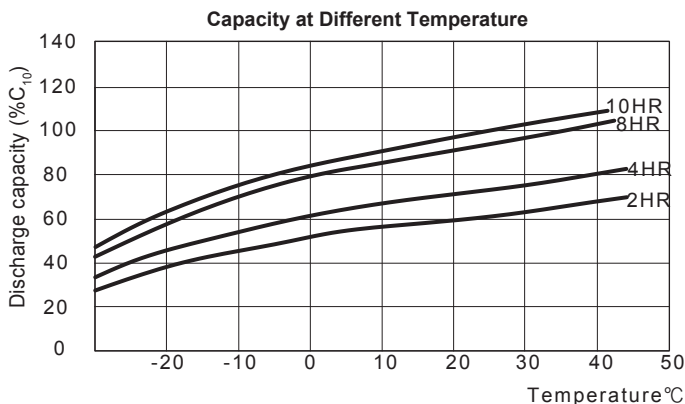
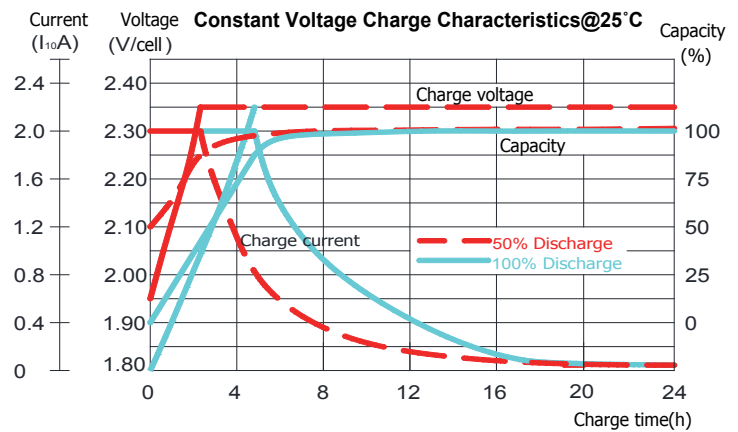
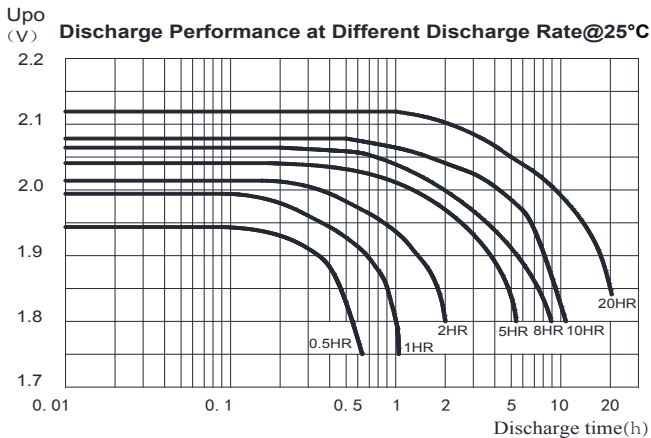
● Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	823.8	525.4	357.0	165.9	116.0	81.3	67.8	36.4	15.5
1.80V	674.8	492.6	333.5	161.0	113.4	79.6	66.2	35.8	15.2
1.85V	593.7	439.0	301.5	152.3	109.5	77.4	64.4	34.5	14.7
1.90V	505.3	377.1	266.8	142.2	105.3	74.4	62.3	33.8	14.4

● Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	1309	1047	719	339	227	159	132	76.1	32.4
1.80V	1247	1009	702	328	221	153	130	74.8	31.9
1.85V	1136	898	638	311	213	149	125	71.8	30.7
1.90V	987	758	551	288	207	139	116	69.6	29.6

● Performance curve :



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