

EXC

Extreme Cyclic Battery

EXC-400



Main Applications

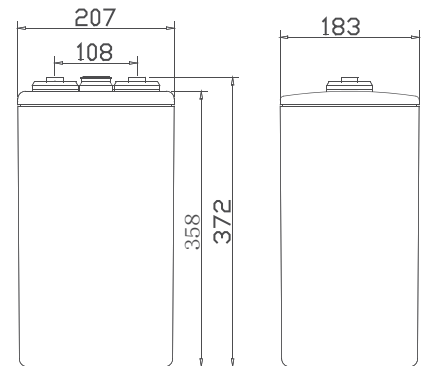
- ▣ Renewable energy (wind & solar) storage system
- ▣ Peak shifting of electrical power system
- ▣ Frequency regulation and load following service
- ▣ Smart-grid & micro-grid sites
- ▣ All extreme environment (off-grid & bad-grid sites)



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	400 Ah @ 10hr to 1.80 V @ 25°C (77°F)
Weight	34.6 kg (76.3 lbs)
Dimensions	Length: 183 mm (7.20 in) Width: 207 mm (8.15 in) Height: 358 mm (14.09 in) Total height: 372 mm (14.65 in)
Internal Resistance (full charged)	0.26 mΩ
Short- circuit Current	6800 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	80 A
Maximum Charging Current	140 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 ₁₀)	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

EXC

Extreme Cyclic Battery

EXC-400



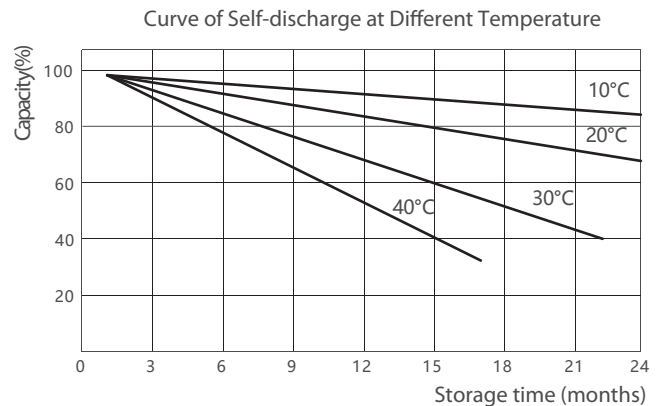
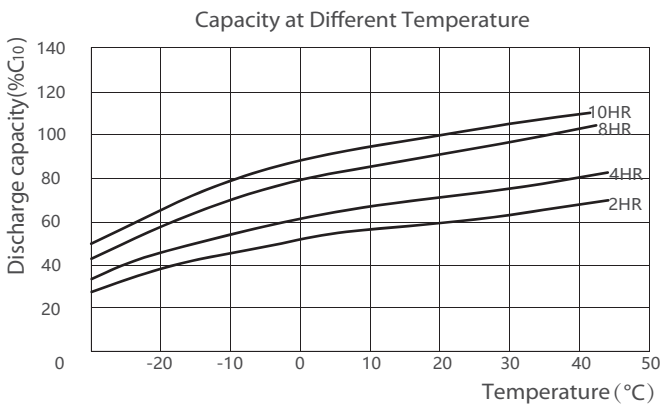
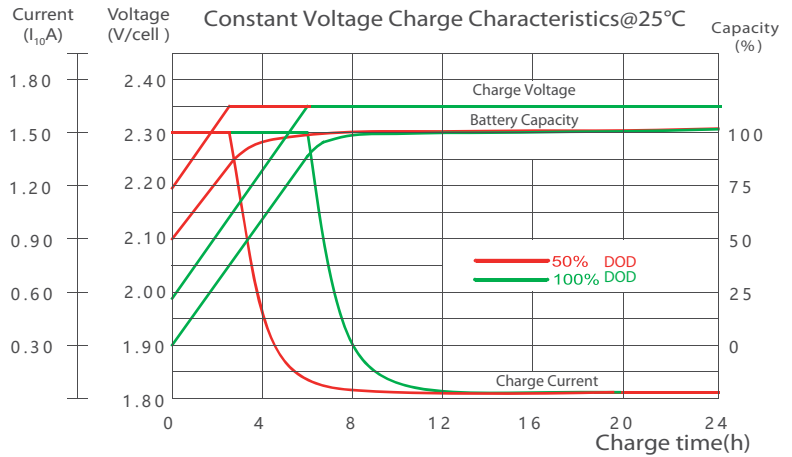
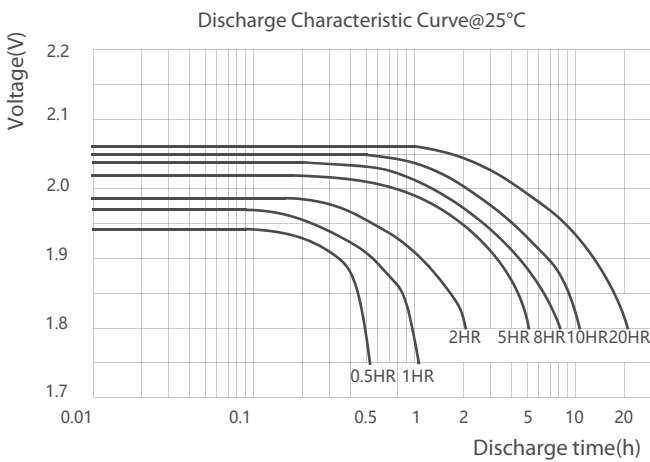
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	564	398	264	112	78	55	46	25.0	10.5
1.80V	529	377	240	108	76	54	45	24.6	10.2
1.85V	422	313	216	103	72	52	42	23.8	9.8
1.90V	341	272	174	87	67	48	39	21.8	9.6

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	1024	739	473	229	148	106	90	48.4	21.6
1.80V	944	683	454	221	144	102	88	46.0	21.2
1.85V	805	619	414	210	142	99	85	44.1	20.5
1.90V	667	510	354	180	128	93	78	42.2	18.6

Performance Curve



*Declaration:

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact CHINASHOTO for the latest information.

Welcome to Visit : www.chinashoto.com