

HTB Series

High Temperature Battery

HTB-500



Main Applications

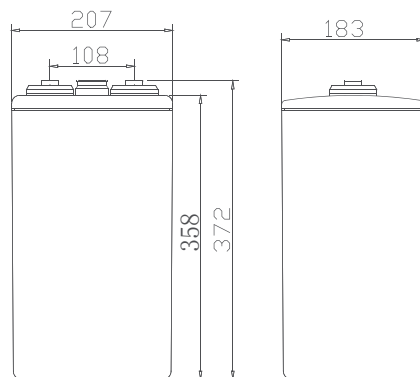
- High temperature environment (35°C)
- O°-grid & bad-grid environment
- Renewable energy (wind & solar) site
- Hybrid telecom site

Benefits

- Reduce operational cost (less cooling consumption)
- Excellent deep cycling performance
- Reduce CO₂ emission
- Secure operation under high temperature up to 55°C



Dimensions



Technical Parameters

Nominal Voltage	2 V
Capacity	500 Ah @10hr to 1.80 V @ 25°C(77°F) 515 Ah @10hr to 1.80 V @ 35°C(95°F)
Weight	34.1 kg (75.18 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)	0.30 mΩ
Short- circuit current	8030 A
Self Discharge @ 35°C(95°F)	Less than 7% after 90 days storage
Operating Temperature Range	Discharge: -40°C ~ 65°C(-40°F ~ 149°F) Charge: -20°C ~ 45°C(-4°F ~ 113°F) Storage: -20°C ~ 40°C(4°F ~ 104°F)
Recommended Operating Temperature	15°C ~ 35°C(59°F ~ 95°F)
Recommended Charging Current	75 A
Maximum Charging Current	125 A
Charging Voltage @35°C(95°F)	Float: 2.23 V/cell Equalize: 2.30 V/cell
Terminal	M8
Container Materials	High Temp ABS /High Temp ABS V0 (Optional)
Capacity A ^{ected} by Temperature(C ₁₀)	106%@ 40°C(104°F) 85%@ 0°C(32°F) 60%@ -20°C(-4°F)
Design life @35°C(95°F)	15 years

Certification

- ISO 9001
- ISO 14001
- GB/T 28001
- UL
- CE

Technical Features

- Operating temperature range -20°C to +65°C
- Best performance for continuous operation up to 35°C
- Extend service life under high temperature
- Excellent over discharge recovery capability
- Long life design for cyclic or floa application

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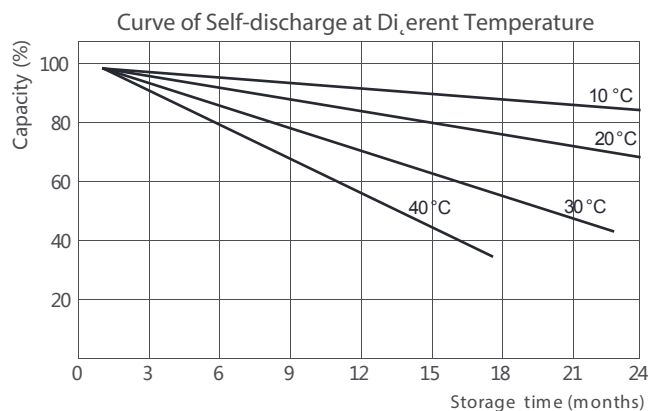
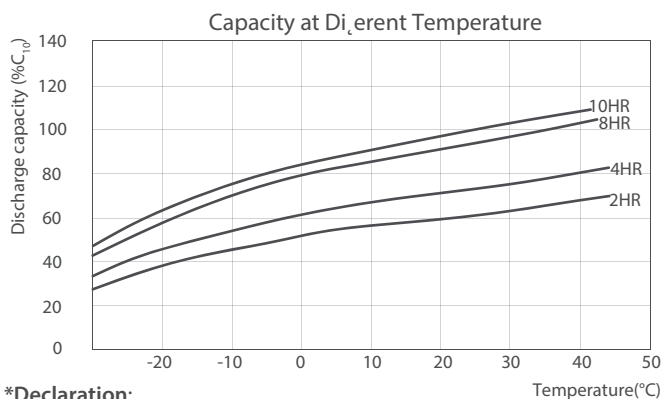
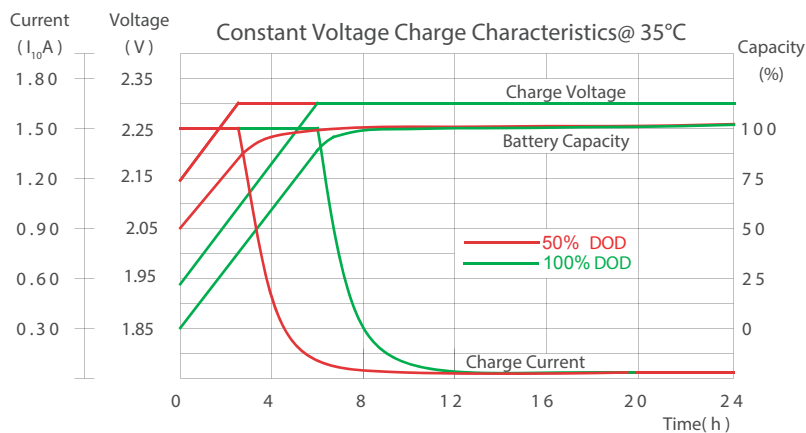
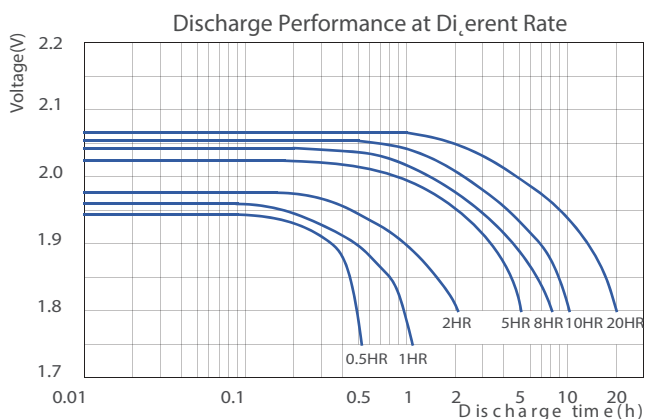
Constant Current Discharge Characteristics Unit: A (35°C, 95°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	12hr	20hr	24hr	48hr	72hr	120hr
1.70V	638	457	292	138	96	65.4	54.0	45.9	29.4	25.0	12.6	8.6	5.4
1.75V	611	424	278	134	92	64.5	53.2	45.2	29.0	24.7	12.4	8.5	5.4
1.80V	540	397	268	130	90	63.1	52.4	44.5	28.5	24.3	12.2	8.4	5.3
1.83V	504	375	255	126	88	62.1	51.9	44.1	28.0	23.8	12.0	8.2	5.2
1.85V	467	353	242	123	86	61.1	51.4	43.7	27.5	23.4	11.8	8.1	5.1
1.90V	374	284	209	104	72	51.4	42.4	36.0	24.4	20.7	11.5	7.9	5.0

Constant Power Discharge Characteristics Unit: W/Cel (35°C, 95°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	12hr	20hr	24hr	48hr	72hr	120hr
1.70V	1076	846	539	273	181	122.8	106.7	96.7	57.4	49.1	26.4	18.1	11.5
1.75V	1036	818	520	261	175	119.7	105.0	95.0	56.8	48.3	25.8	17.8	11.3
1.80V	992	712	510	255	174	118.4	102.6	92.7	56.3	47.8	25.4	17.4	11.1
1.83V	943	687	504	249	172	117.1	101.2	92.0	54.8	46.6	24.9	17.1	10.9
1.85V	893	663	498	243	170	115.9	99.7	91.2	53.4	45.4	24.4	16.9	10.7
1.90V	720	532	432	207	145	102.6	84.5	76.8	48.4	41.2	22.9	15.6	9.9

Performance Curve



*Declaration:

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