

HTD Series Battery

SPACEFLIGHT HTD series battery is Deep Cycle AGM battery designed with thicker plates with more high-density active materials which makes the battery can with stand repeated deep cyclic applications.

Applications

- Solar and wind power systems
- Communication systems
- Uninterruptible power supplies
- Golf carts and buggies
- Alarm and security system
- Electric toy and wheelchairs, etc

General Features

- 5 years designed floating life(25°C)
- Non-spillable construction
- Sealed and maintenance-free
- Excellent recovery from deep discharge
- High density active materials plates
- Longer Life and low self-discharge

Standards

- Compliance with IEC, BS, JIS and EU standards.
- UL, CE Certified
- ISO45001,ISO9001 and ISO14001 certified production facilities

Specifications

Rated Voltage	12V	
Nominal Capacity	28Ah	(C ₂₀ , 10.5V)
Approx Weight	8.5kg±3%(18.74lbs)	
Terminal	F4	

Rated Capacity(25°C)	28 Ah	(20hr,1.4A,10.5V)
	27 Ah	(10hr,2.7A,10.5V)
	24 Ah	(5hr,4.8A,10.5V)
	17.5 Ah	(1hr,17.5A,9.6V)

Max.Discharge Current 420A(5s)

Max.Charge Current 7A

Internal Resistance(25°C) Approx 11mΩ

Operating Temp.Range	Discharge	-20~60°C(-4~140°F)
	Charge	-10~50°C(14~122°F)
	Storage	-20~60°C(-4~140°F)

Nominal operating temperature 25±5°C

Charge Voltage @25°C(77°F)	Cycle Use	Initial Charging Current less than 7A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	Standby Use	Initial Charging Current less than 7A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C

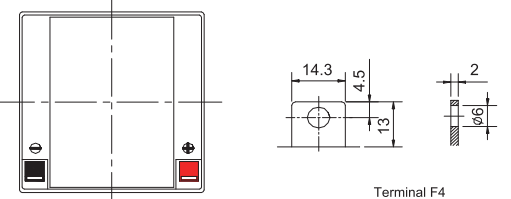
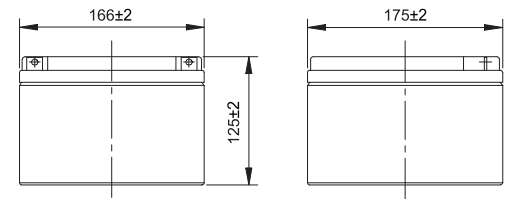
Temperature effects on capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
	-15°C (5°F)	65%

Self Discharge(25°C)	Capacity after 3 months storage	91%
	Capacity after 6 months storage	82%
	Capacity after 12 months storage	65%



Dimensions

unit:mm



Length	166±2mm (6.54 inches)
Width	175±2mm (6.93 inches)
Container Height	125±2mm (4.92 inches)
Total Height	125±2mm (4.92 inches)

Battery Construction

Component	Positive plate	Negative plate	Container	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS(UL94-HB) or FR(UL94-V0)	Rubber	Copper	Fiberglass	Sulfuric acid

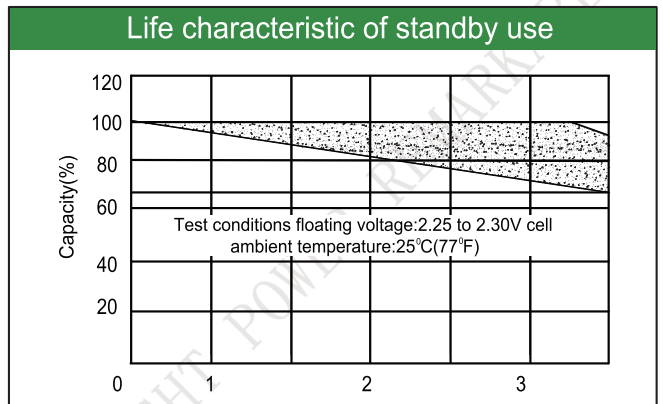
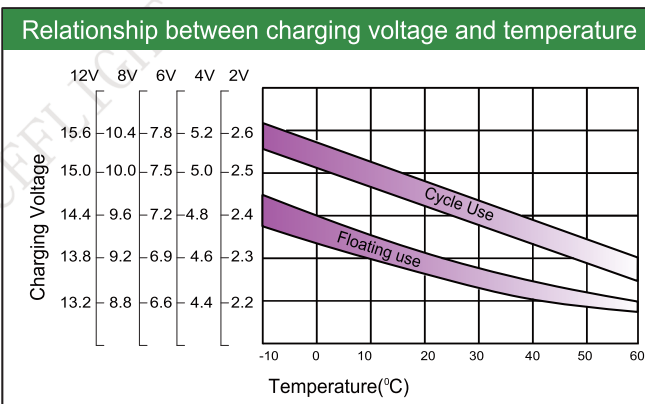
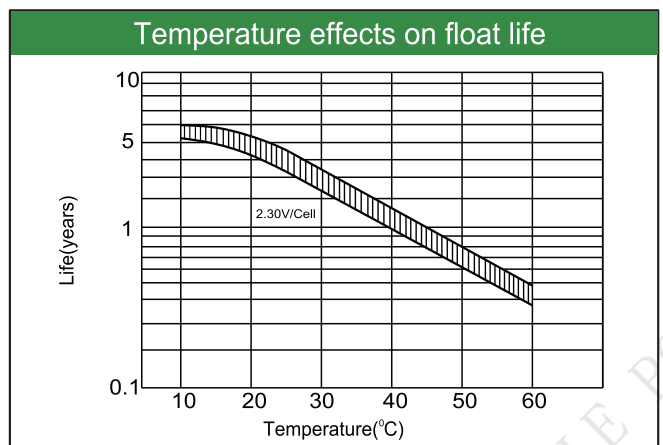
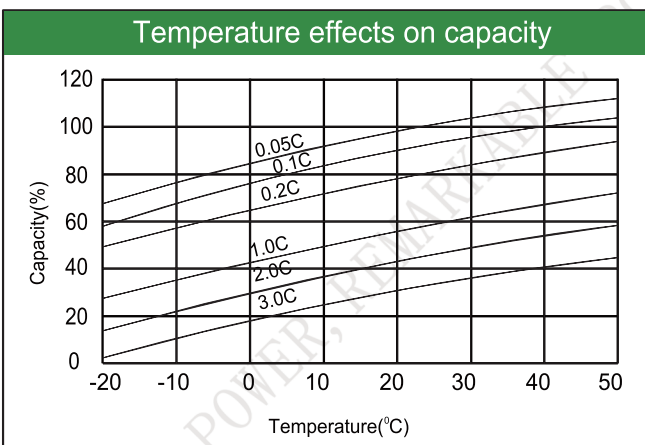
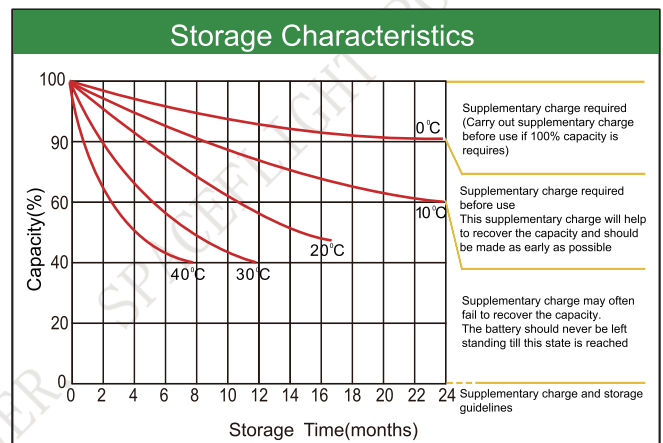
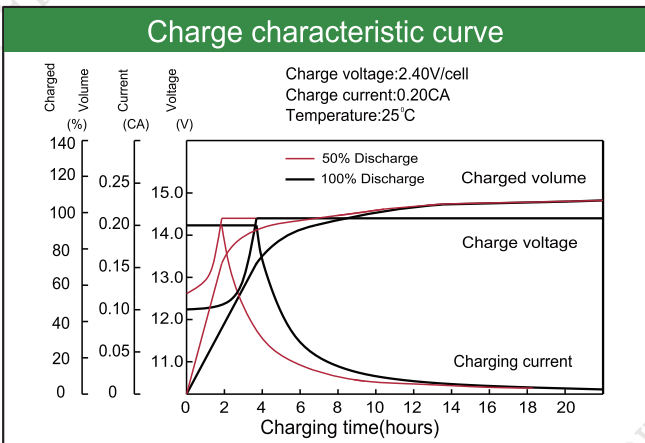
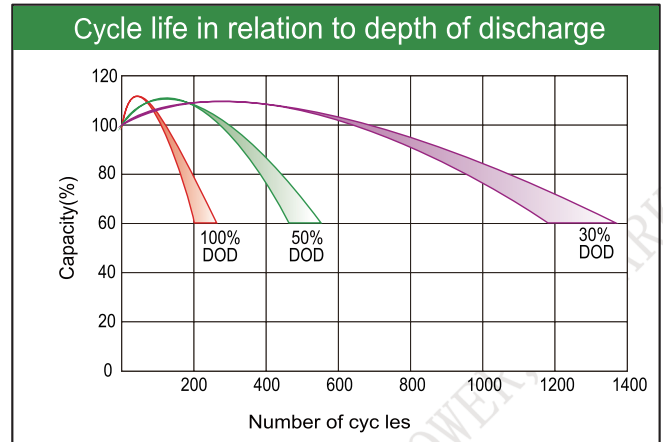
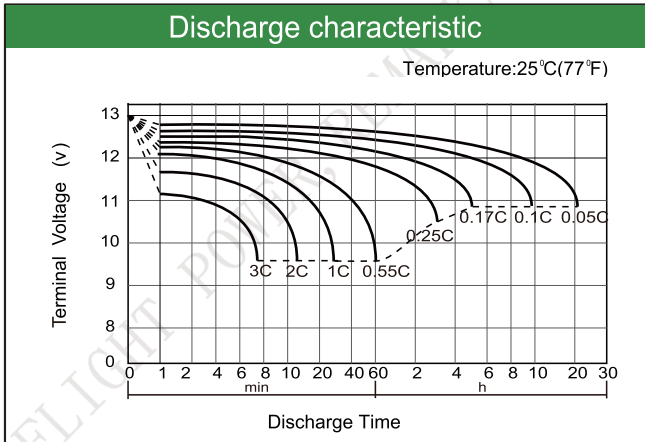
Constant Current Discharge (Amperes) at 25°C(77°F)

E.V/Time	5min	10min	15min	30min	60min	3h	5h	10h	20h
1.60V	110	76.0	52.0	31.0	17.5	7.67	5.28	2.82	1.48
1.65V	104	72.4	49.7	29.8	17.0	7.46	5.11	2.78	1.45
1.70V	98.3	68.6	47.3	28.5	16.5	7.20	4.94	2.74	1.42
1.75V	92.2	64.7	44.9	27.1	15.9	6.92	4.80	2.70	1.40
1.80V	86.1	60.9	42.4	25.7	15.1	6.62	4.63	2.65	1.38

Constant Power Discharge (Watts/cell) at 25°C(77°F)

E.V/Time	5min	10min	15min	30min	45min	60min	2h	3h	5h
1.60V	208	135	105	61.7	46.7	36.7	24.0	16.0	10.4
1.65V	195	127	99.3	58.6	44.5	35.1	23.3	15.6	10.2
1.70V	183	119	93.6	55.4	42.3	33.5	22.5	15.2	10.0
1.75V	170	111	87.8	52.2	40.0	31.8	21.6	14.4	9.90
1.80V	157	104	82.0	49.0	37.7	30.1	20.7	13.8	9.80

Note: The above characteristics data are average values obtained Within three charge/discharge cycles not the minimum.



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