

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

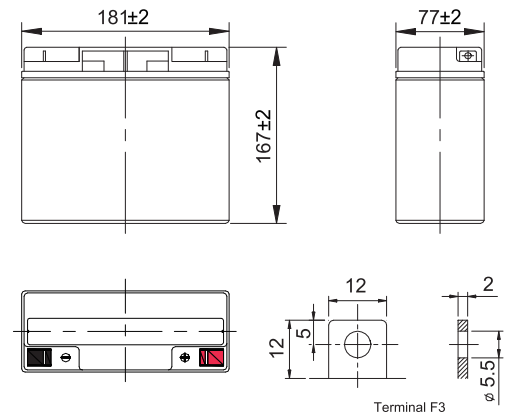
Specifications

Rated Voltage	12V	
Nominal Capacity	18Ah	(C ₂₀ , 10.5V)
Approx Weight	5.2kg±3%(11.46lbs)	
Terminal	F3	
Rated Capacity(25°C)	18 Ah	(20hr,0.9A, 10.5V)
	17.2 Ah	(10hr, 1.72A, 10.5V)
	15.5 Ah	(5hr, 3.1A, 10.5V)
	11.5 Ah	(1hr, 11.5A, 9.6V)
Max.Discharge Current	270A(5s)	
Max.Charge Current	4.5A	
Internal Resistance(25°C)	Approx 18mΩ	
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	Cycle Use	Initial Charging Current less than 4.5A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	Standby Use	Initial Charging Current less than 4.5A. 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	181±2mm (7.13 inches)
Width	77±2mm (3.03 inches)
Container Height	167±2mm (6.57 inches)
Total Height	167±2mm (6.57 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

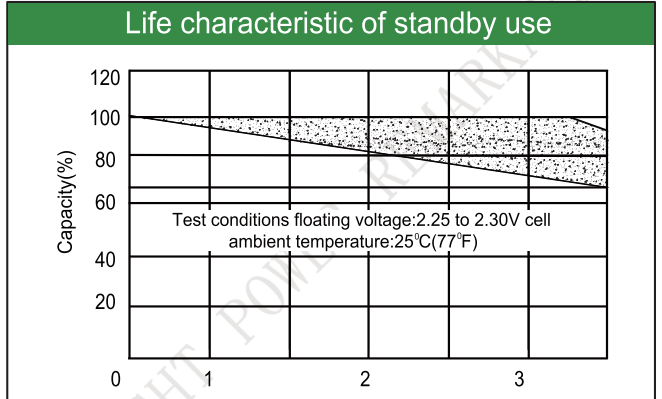
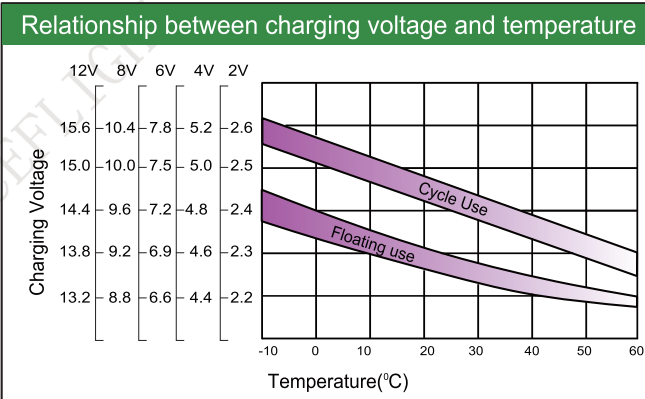
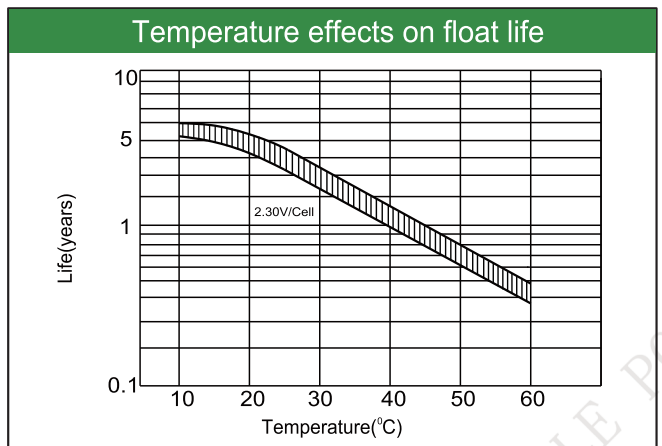
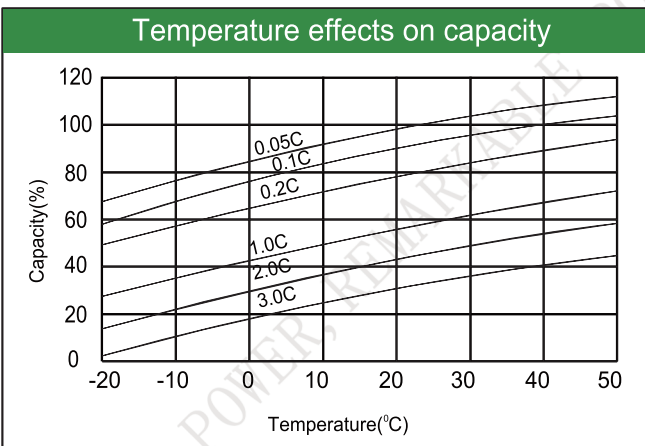
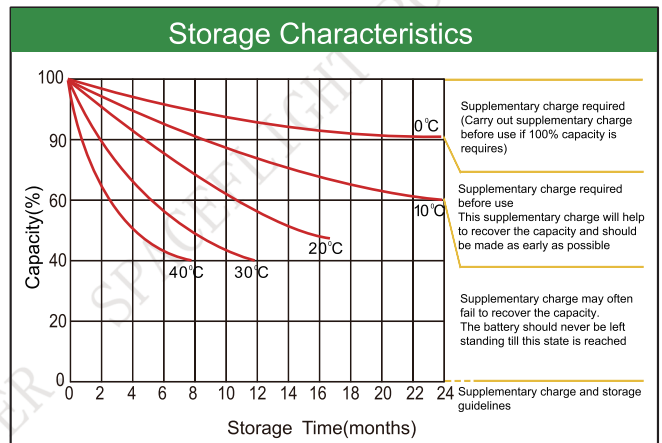
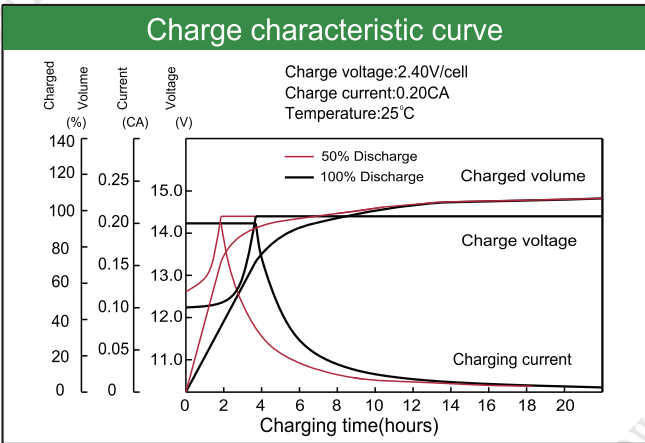
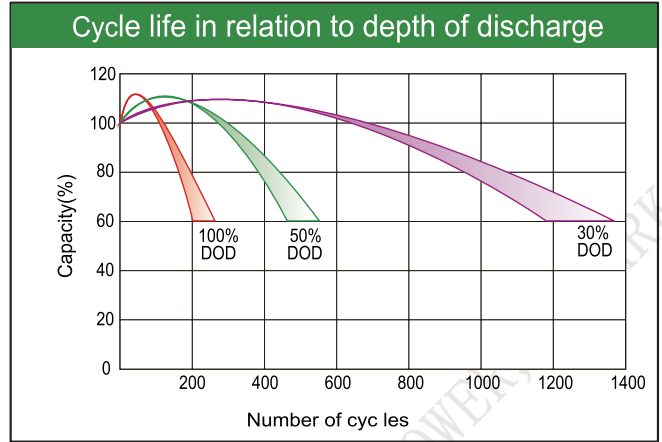
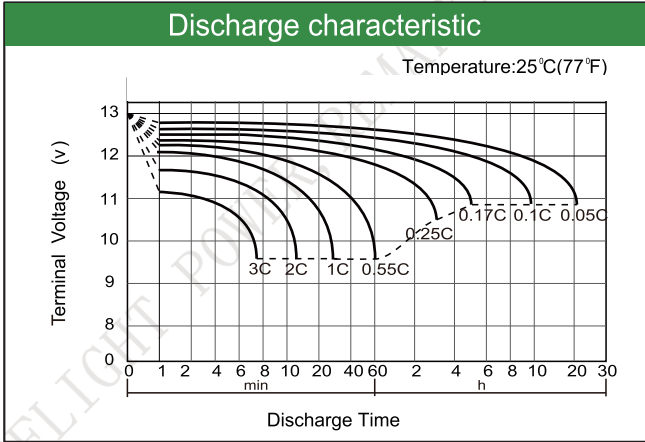
Constant Current Discharge (Amperes) at 25°C(77°F)

E.V/Time	5min	10min	15min	30min	60min	3h	5h	10h	20h
1.60V	67.45	45.32	34.52	20.33	11.50	4.75	3.23	1.78	0.94
1.65V	65.01	44.26	33.67	19.91	11.33	4.66	3.18	1.76	0.93
1.70V	62.58	43.20	32.82	19.48	11.01	4.55	3.12	1.74	0.92
1.75V	60.14	41.93	31.98	19.06	10.59	4.46	3.10	1.72	0.90
1.80V	57.71	40.81	31.13	18.53	10.27	4.36	3.02	1.69	0.89

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

E.V/Time	5min	10min	15min	30min	45min	60min	2h	3h	5h
1.60V	137	86.5	68.7	40.2	29.4	23.7	15.4	11.1	6.96
1.65V	132	83.9	67.1	39.0	28.4	22.8	14.4	10.4	6.96
1.70V	127	80.5	64.4	37.7	27.1	21.6	13.6	9.60	6.61
1.75V	120	77.0	61.7	36.3	25.9	20.4	12.7	8.80	6.24
1.80V	113	73.4	59.3	34.8	24.5	19.1	11.5	7.80	5.78

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



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