

VRLA AGM Battery

BT-HSE-150-12 [12V150Ah]



General Features

- Designed floating charging service life: 12 years (25°C).
- AGM technology for efficient gas recombination of up to 99%.
- Sealed and maintenance free operation, safety valve for explosion proof.
- Low self-discharge characteristic, ≤ 3% of capacity per month at 20°C (average).
- Wide operating temperature range with charge from -10°C~60°C, discharge from -20°C~60°C, storage from -20°C~60°C.
- Flat Plates in Lead Aluminum Calcium Tin alloy high energy, prevent corrosion.
- ABS flame retardant case, classified to UL94-V0 is available on request.

Applications

- DC power supply.
- UPS/ EPS power supply.
- Electrical devices & instruments.
- Security and fire alarm systems.
- Telecom stations and power stations.
- Medical equipment.
- Emergency lighting systems.

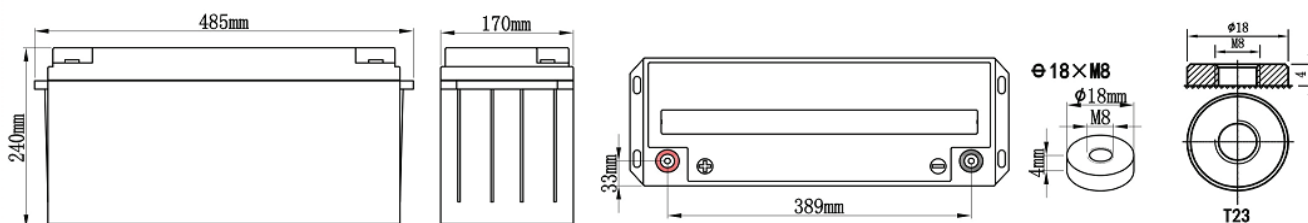
Battery Construction

Component	Battery Container	Safety valve	Terminal	Separator	Electrolyte
Raw material	ABS	Rubber	Copper alloy	Fiberglass	Sulfuric acid

Physical Specifications

Nominal Voltage/ No. of cell	Nominal Capacity (10HR)	Dimension (±3mm)				Weight (±3%)	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V/6 cells	150Ah	485 mm	170 mm	240 mm	240 mm	Apx. 43.5 kg (95.7 lbs)	≤ 3.5 mΩ	T23 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity at 77°F(25°C)	
20 hour rate (7.85A to 10.8V)	157Ah
10 hour rate (15.0A to 10.8V)	150Ah
5 hour rate (25.5A to 10.5V)	128Ah
3 hour rate (36.8A to 10.5V)	110Ah
1 hour rate (89.5A to 10.2V)	89.5Ah
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application
1. Limit initial current less than 45A
2. Charge until battery voltage (under charge) reaches 14.1V to 14.7V at 25°C(77°F)
3. Hold at 14.1V to 14.7V until current drop to under 0.5A for at least 3 hours
4. Temperature compensation coefficient of charging voltage is -30mV/°C
Standby Service
1. Hold battery across constant voltage source of 13.5 to 13.8 volts at 25°C(77°F) with current limit 45A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status
2. Temperature compensation coefficient of charging voltage is -18mV/°C
Max. discharge current (5s): 1050A Short Circuit Current: 2850A

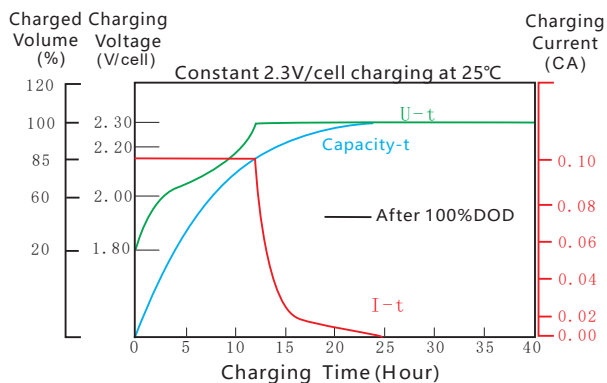
NOTE: All data shall be changed without notice. Saite reserves the right to explain and update the information contained hereinto. The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

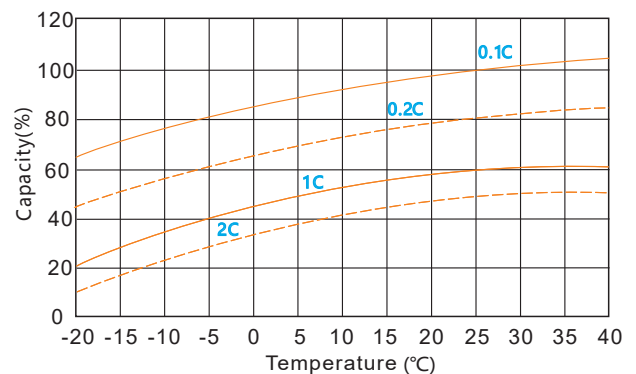
End Volts/ Cell	Minute (M)			Hour (H)							
	10	15	30	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A											
1.60V	361	285	160	94.0	74.0	63.0	39.6	27.3	18.5	15.6	8.06
1.65V	345	273	153	91.8	72.3	61.5	38.7	26.7	18.1	15.5	8.01
1.70V	329	260	146	89.5	70.5	60.0	37.7	26.1	17.8	15.3	7.96
1.75V	313	248	139	87.3	68.8	58.5	36.8	25.5	17.4	15.2	7.90
1.80V	297	235	132	85.0	67.0	57.0	35.8	24.9	17.0	15.0	7.85
Constant Power Discharge Data Sheet (@25°C) Unit: W											
1.60V	644	564	345	201	146	110	81.8	52.7	40.0	30.8	16.7
1.65V	625	539	329	196	143	107	79.9	51.4	39.3	30.6	16.5
1.70V	606	514	314	192	140	104	78.0	50.2	38.5	30.3	16.3
1.75V	587	489	299	187	136	102	76.1	48.9	37.8	30.0	16.2
1.80V	530	464	284	182	133	99.3	74.2	47.7	37.0	29.7	16.0

Performance Characteristics

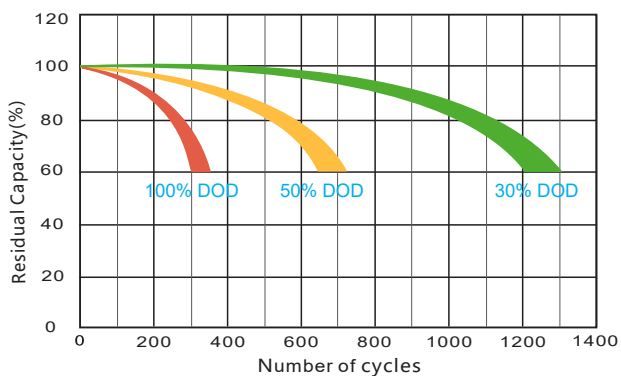
Charge Characteristic (25°C/77°F)



Capacity Curve at Different Temperature



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristic

