

DEEP CYCLE SERIES

SN12100DC (12V 100AH)



Specifications

Nominal Voltage	12V	
Nominal Capacity(10hr)	100AH	
Dimension	Length	330±3mm(12.91inch)
	Width	173±2mm(6.73inch)
	Height	212±2mm(8.42inch)
	Total Height	220±2mm(12.91inch)
Approx Weight	Approx. 29.4kg(64.81lbs)	
Terminal Type	T3	
container Material	ABS(UL-94HB)	
Internal Resistance	Approx. 14mΩ	
Rated Capacity	104AH/5.2A	(20hr, 1.80V/cell,25°C/77°F)
	100AH/10.0A	(10hr, 1.80V/cell,25°C/77°F)
	87AH/17.4A	(5hr, 1.75V/cell,25°C/77°F)
	77AH/25.6A	(3hr, 1.75V/cell,25°C/77°F)
	62AH/62A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	1200A(5S)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Charge Current Less Than 0.25CA	
	14.1V~14.7V@25°C(77°F)Temp. Coefficient -30mV/°C	
Floating Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V@25°C(77°F)Temp. Coefficient -20mV/°C	
	40°C	103%
Capacity affected by Temperature	25°C	100%
	0°C	86%
	-15°C	65%
	3 month	Remaining capacity: 91%
Self-discharge	6 month	Remaining capacity: 82%
	12month	Remaining capacity: 65%



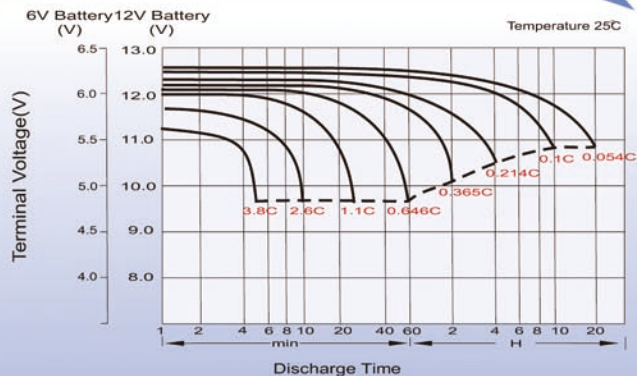
Constant Power Discharge at 25°C(77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	312.9	248.6	213.5	180.4	145	110.7	90.9	58.3	46.3	37.9	30.6	26.8	21.8	18.7	10.2
1.80V/cell	415.6	313.9	254.5	210.1	168.5	127.7	101.3	63.2	49.5	40.3	32.8	28.6	23.1	19.8	10.3
1.75V/cell	458.6	339.3	274.6	223.9	173.5	131.3	105.5	65.3	50.2	41	33.5	29.3	23.4	19.9	10.4
1.70V/cell	491	361.5	289.1	233.5	179.5	136	108.5	67.8	51.5	42	34.3	29.8	23.7	20.1	10.6
1.65V/cell	533.7	386.5	305	246.2	187.8	138.1	111.3	69.3	53.5	43.3	35.1	30.4	24	20.5	10.7
1.60V/cell	575.1	410.1	320.8	259.4	196.9	143.2	114.7	71.2	54.9	44.5	36.2	31	24.2	20.7	10.8

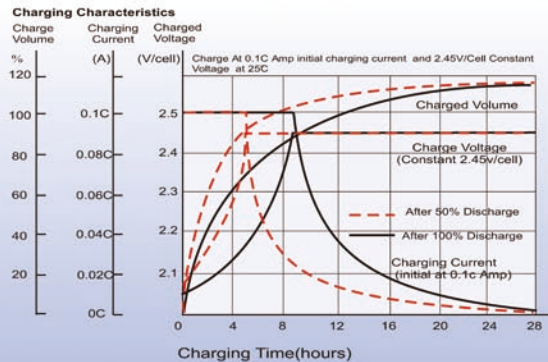
Constant Current Discharge at 25°C(77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	171.2	134.6	114.4	95.7	76.1	57.6	47.1	30	23.7	19.4	15.6	13.6	11	9.44	5.15
1.80V/cell	229.7	171.9	138.3	113.1	89.8	67	52.8	32.8	25.6	20.7	16.8	14.6	11.7	10	5.2
1.75V/cell	259	188.9	151	121.7	93.2	69.5	55.3	34	26	21.2	17.2	15	11.9	10.1	5.25
1.70V/cell	285.2	205.9	161.2	127.9	97	72.3	57	35.3	26.8	21.7	17.7	15.3	12.1	10.2	5.35
1.65V/cell	314.5	222.2	171.4	135.9	102.3	74.1	58.9	36.3	27.9	22.5	18.1	15.6	12.3	10.4	5.42
1.60V/cell	346.9	241.3	183.4	144.8	108	77.2	61	37.6	28.7	23.2	18.7	16	12.4	10.5	5.45

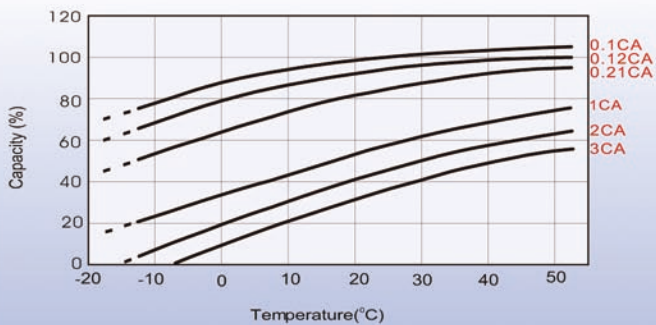
Discharge Characteristics



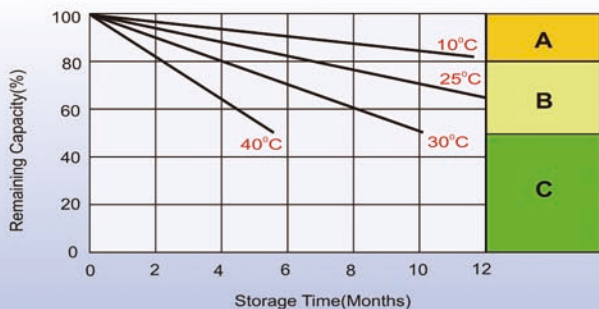
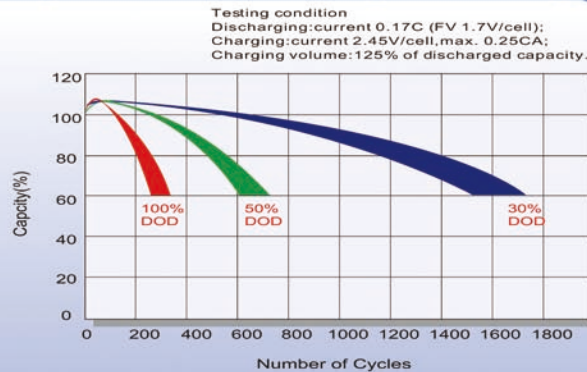
Charging Characteristics (cycle use)



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.