

# DC120-12D DATA SHEET



## DC120-12D

**120AH@20HR**

**12-Volt**

**DEEP CYCLE**

**Maintenance-Free  
Sealed AGM Battery**

### Nominal Specifications

Battery Model	DC120-12D	Rated Capacity	120AH/20HR
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### Mechanical Specifications

Group Size	N/A	
Overall Height (H)	301±2mm	11.85"
Container Height (h)	297±2mm	11.69"
Length	260±2mm	10.24"
Width	180±2mm	7.09"
Weight	Approx.38.7kg	85.32lbs.
Terminal Type	M8- Button Terminal	
Terminal Torque	9.6-10.7 N.m	
Container Material	ABS: Standard (UL 94-HB)	

### Temperature Range Specifications

Operating Temperature Range	Discharge : -15°C ~+ 50°C (5°F ~122°F)
	Charge: -15°C ~ +40°C (5°F ~104°F)
	Storage: -15°C ~ +40°C (5°F ~104°F)
Recommended Operating Temperature Range	+74°F (23°C) to +80°F (27°C)
Self-Discharge	Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, For higher temperatures the time interval will be shorter.

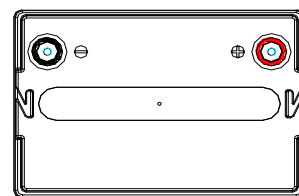
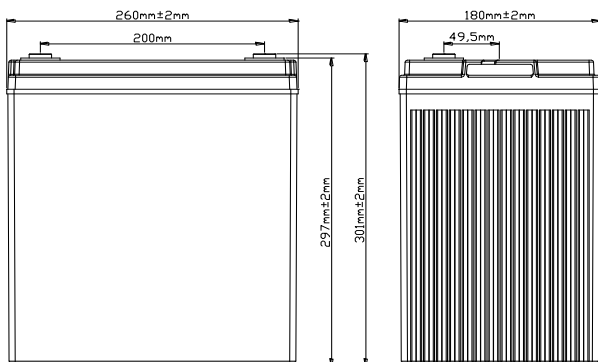
### Electrical Specifications

C100	132AH
C20	120AH
C10	112AH
C5	98AH
CCA	750A
CA or MCA	900A
HPCA	1020A
Max. Discharge Current	1200A (5s)
Internal Resistance	4.0mΩ
<b>Reserve Capacity</b>	
Reserve @25 AMPS	230Minutes
Reserve @75 AMPS	56Minutes

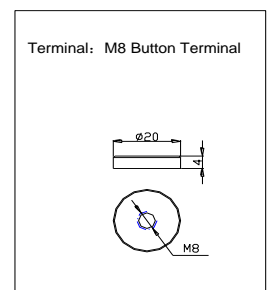
### Charge Voltages

Float Charging Voltage	13.5 to 13.8 VDC/unit@ (25°C)	
Equalization and Cycle Service Charging Voltage	14.3 to 14.5 VDC/unit @ (25°C)	
Maximum Charge Current(A)	30A	
Charging Temperature Compensation	Cycle use	-4mV/cell/°C
	Float use	-3mV/cell/°C

### BATTERY & TERMINAL DIMENSIONS (All units shown in mm)



Battery bank spacing required 12.5mm (1/2"inch) minimum



### Constant Current Discharge Rating Amperes @ 77°F (25°C)

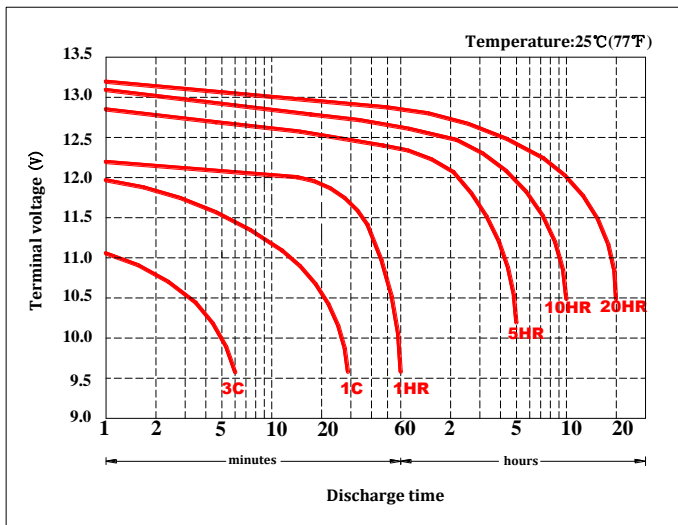
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	192	118	90.3	70	40.1	28.2	19.4	13.7	11.2	9.7	6.0

**Note** The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

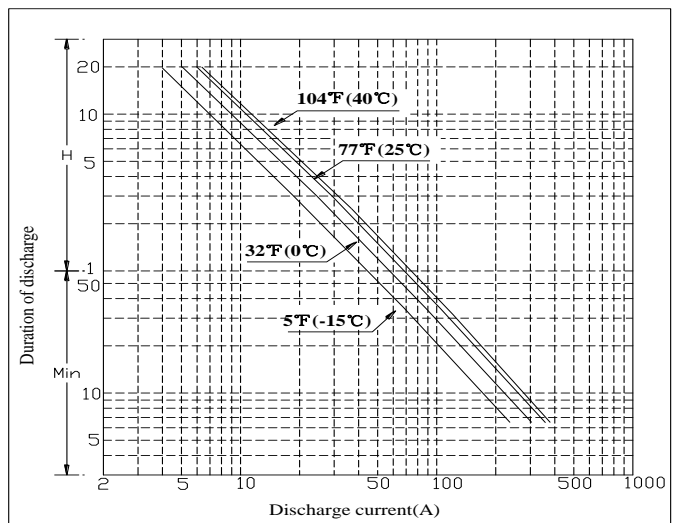


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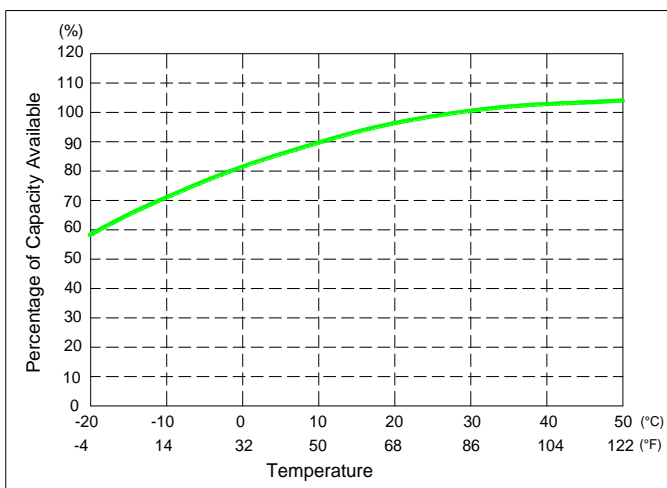
## Terminal Voltage(V) and Discharge Time



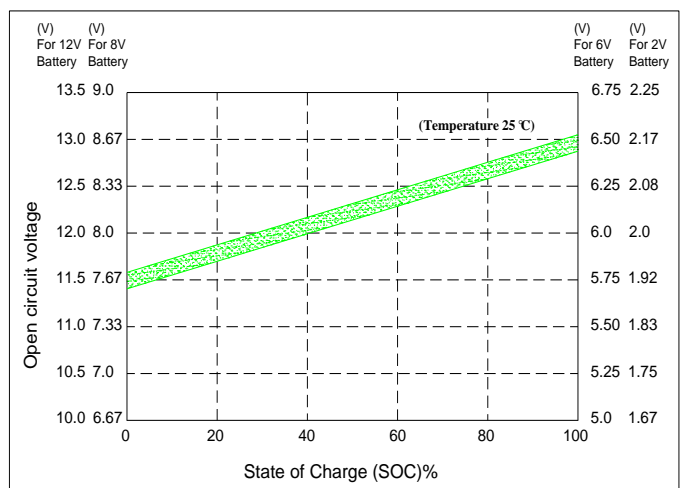
## Duration of discharge vs. Discharge current



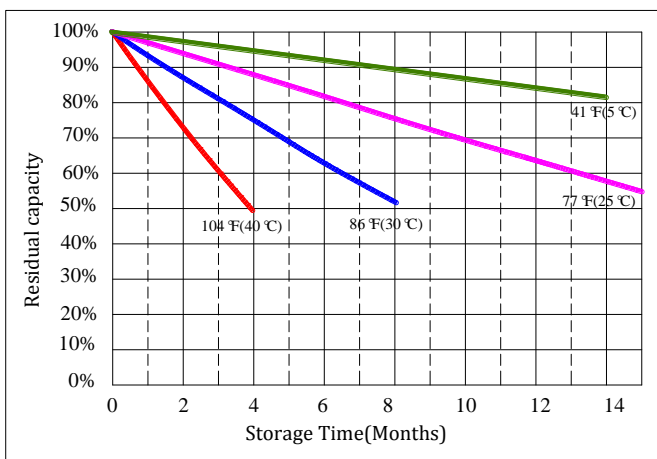
## Percent Capacity vs. Temperature



## State of Charge(SOC) vs Open Circuit Voltage(OCV)



## Capacity Retention Characteristic



## Cycle Life vs. Depth of Discharge(DOD)

