

# DC180-8A DATA SHEET



## DC180-8A

180AH@20HR

8-Volt

DEEP CYCLE

Maintenance-Free  
Sealed AGM Battery

### Nominal Specifications

Battery Model	DC180-8A	Rated Capacity	180AH/20HR
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### Mechanical Specifications

Group Size	GC8	
Overall Height (H)	272±2mm	10.71"
Container Height (h)	268±2mm	10.55"
Length	260±2mm	10.24"
Width	182±2mm	7.17"
Weight	Approx.34.2kg	75.40lbs.
Terminal Type	M8-Button Terminal	
Terminal Torque	9.6-10.7N.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.

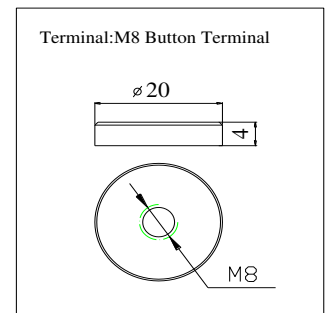
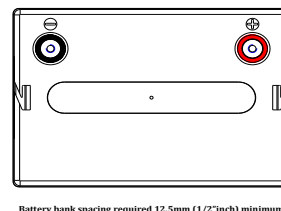
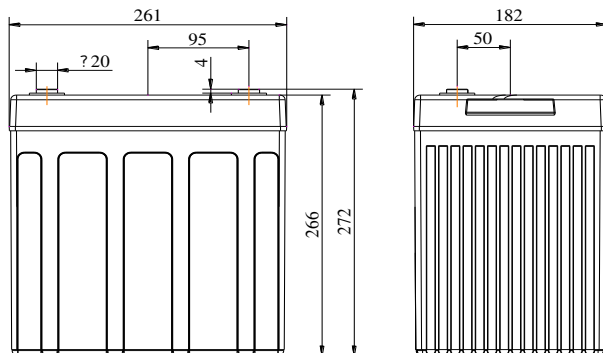
### Electrical Specifications

C100	198AH
C20	180AH
C10	144AH
C5	147.5AH
CCA	940A
CA or MCA	1125A
HPCA	1350A
Max. Discharge Current	1800A (5s)
Internal Resistance	1.8 mΩ
<b>Reserve Capacity</b>	
Reserve @25 AMPS	335 Minutes
Reserve @56 AMPS	125 Minutes

### Charge Voltages

Float Charging Voltage	9.0 to 9.2 VDC/unit@ (25°C)	
Equalization and Cycle Service Charging Voltage	9.53 to 9.67 VDC/unit @ (25°C)	
Maximum Charge Current(A)	45 A	
Charging Temperature Compensation	Cycle use	-4mV/cell/°C
	Float use	-3mV/cell/°C

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



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

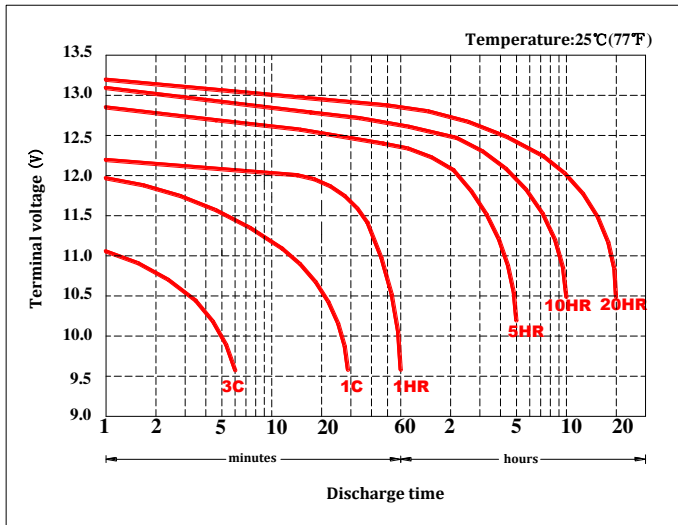
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	260	168	124	102.3	63.2	45.5	29.0	20.0	16.5	13.95	9.00

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

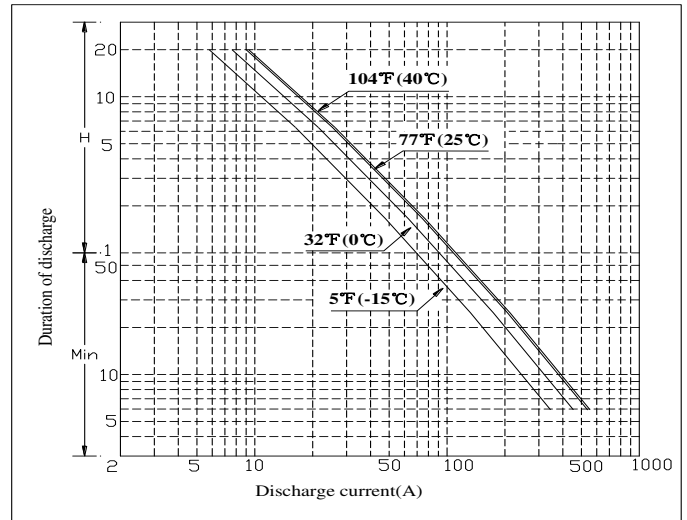


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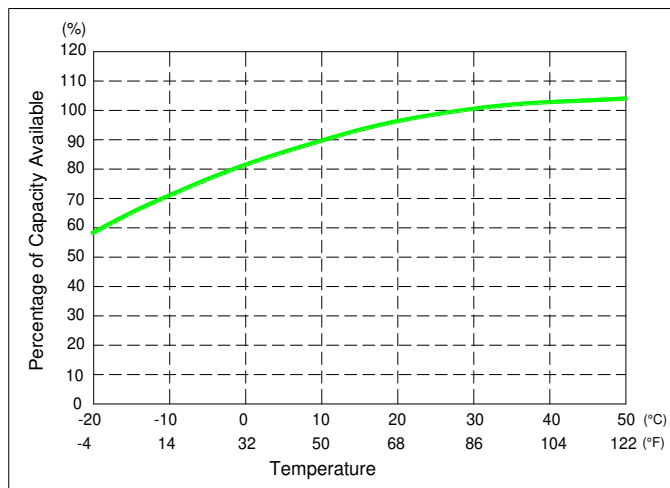
## Terminal Voltage(V) and Discharge Time



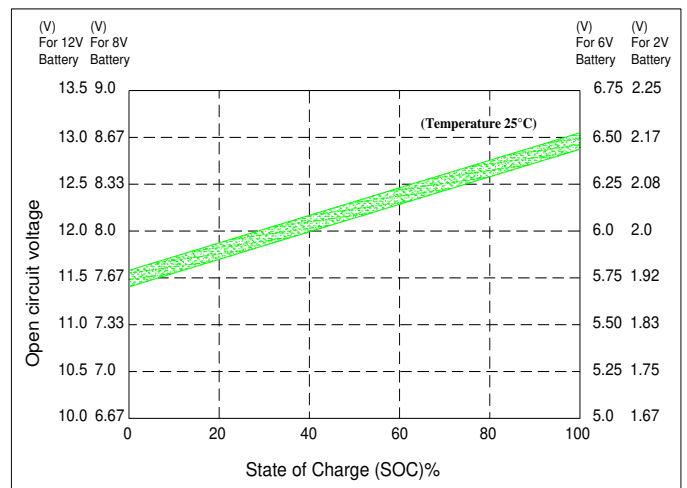
## Duration of discharge vs. Discharge current



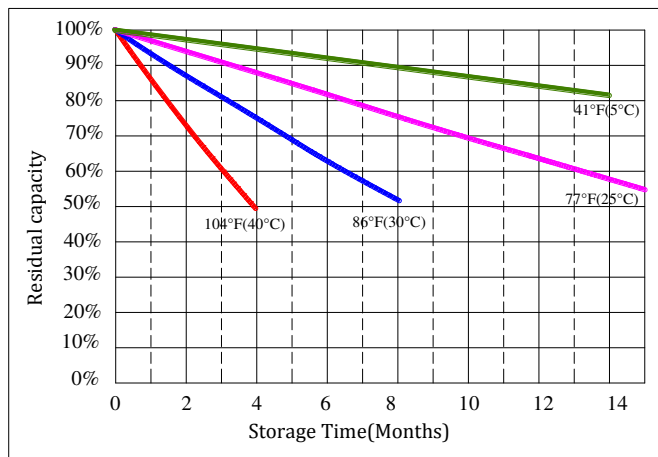
## Percent Capacity vs. Temperature



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



## Capacity Retention Characteristic



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

