

# DC180-8B DATA SHEET



## DC180-8B

180AH@20HR

8-Volt

DEEP CYCLE

Maintenance-Free  
Sealed AGM Battery

### Nominal Specifications

Battery Model	DC180-8B	Rated Capacity	180AH/20HR
---------------	----------	----------------	------------

### Mechanical Specifications

Group Size	GC8	
Overall Height (H)	288±2mm	11.34"
Container Height (h)	288±2mm	11.34"
Length	260±2mm	10.24"
Width	182±2mm	7.17"
Weight	Approx.34.3kg	75.62lbs.
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.

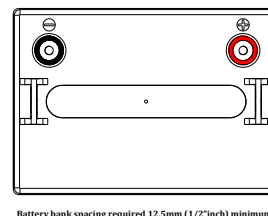
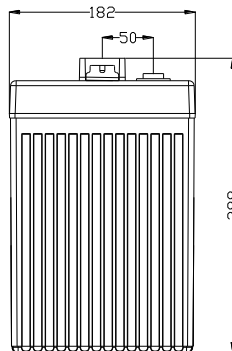
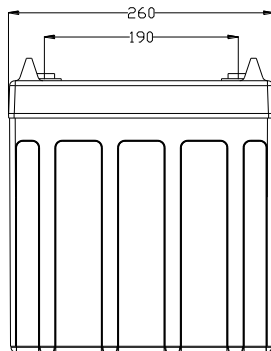
### Electrical Specifications

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
Reserve Capacity	
Reserve @25 AMPS	335 Minutes
Reserve @56 AMPS	125 Minutes

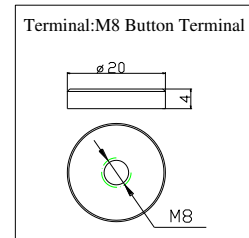
### Charge Voltages

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)



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



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

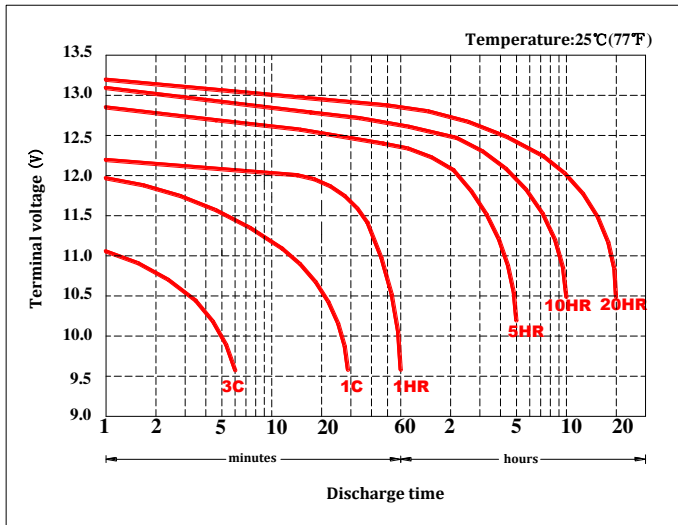
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	260	168	124	102.3	63.2	45.5	29.0	20.0	16.5	13.95	9.00

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

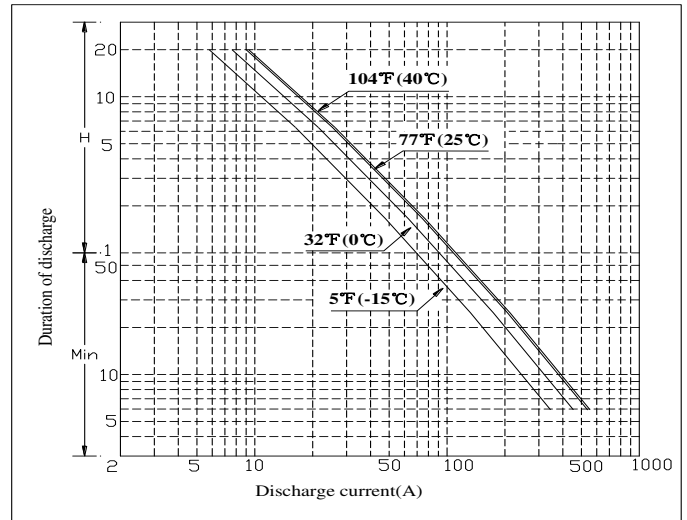


# DC180-8B DATA SHEET

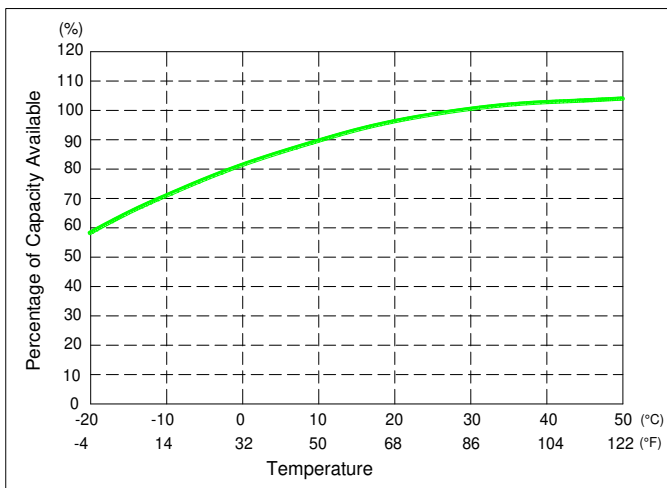
## Terminal Voltage(V) and Discharge Time



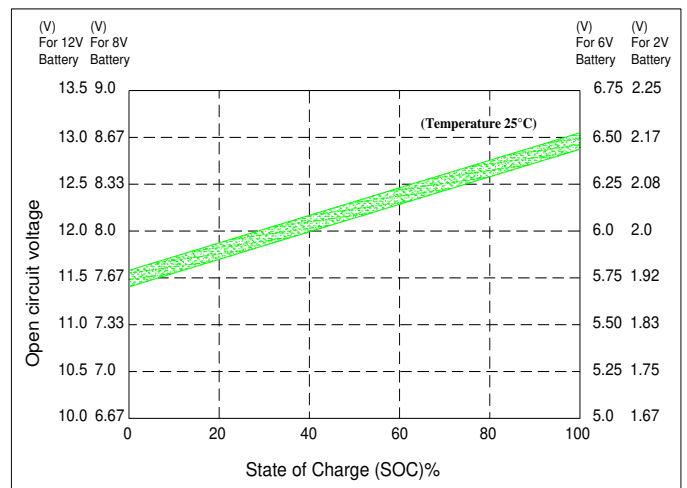
## Duration of discharge vs. Discharge current



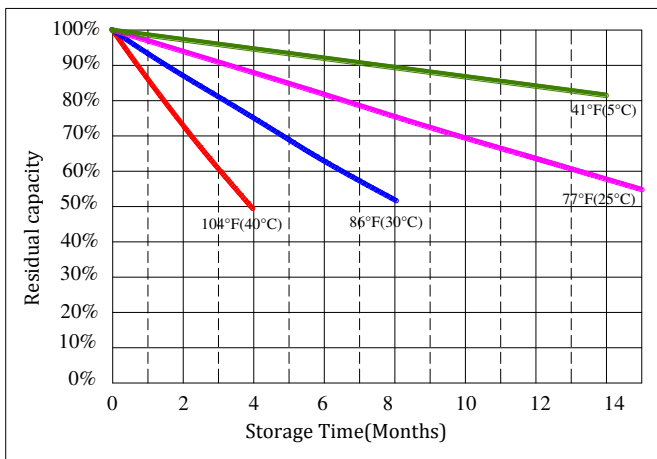
## Percent Capacity vs. Temperature



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



## Capacity Retention Characteristic



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

