

DC220-12 DATA SHEET



DC220-12

220AH@20HR

12-Volt

DEEP CYCLE

**Maintenance-Free
Sealed AGM Battery**

Nominal Specifications

Battery Model	DC220-12	Rated Capacity	220AH/20HR
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Mechanical Specifications

Group Size	4D	
Overall Height (H)	222±2mm	8.74"
Container Height (h)	218±2mm	8.58"
Length	522±2mm	20.55"
Width	242±2mm	9.53"
Weight	Approx.66kg	145.5lbs.
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.

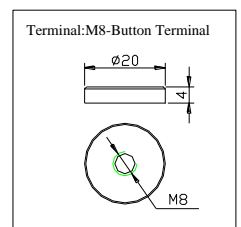
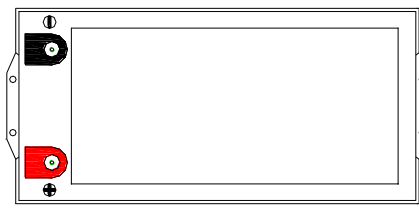
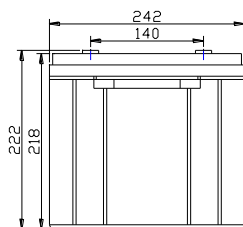
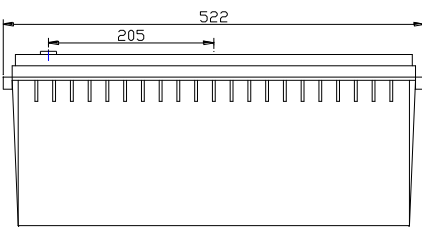
Electrical Specifications

C100	240AH
C20	220AH
C10	189AH
C5	175AH
CCA	1150A
CA or MCA	1380A
HPCA	1650A
Max. Discharge Current	2200A (5s)
Internal Resistance	2.5mΩ
Reserve Capacity	
Reserve @25 AMPS	415Minutes
Reserve @75 AMPS	110Minutes

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)	55A	
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)

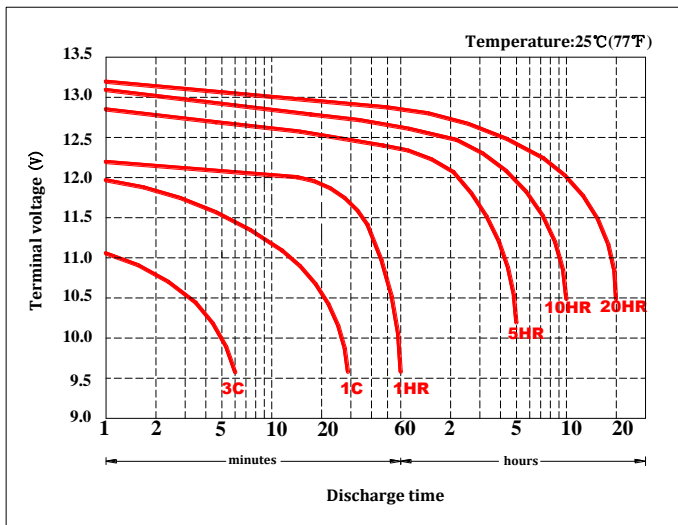
Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H
1.75V	320	196	144	119.4	63.2	47.5	33.3	22.8	18.90	16.10	11.0

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

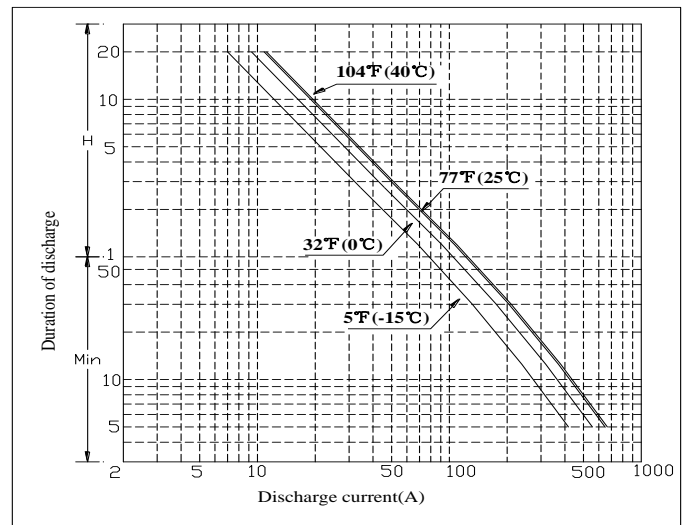


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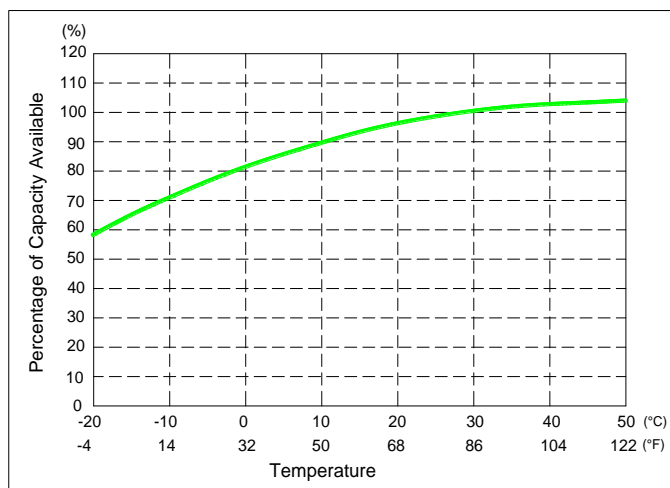
Terminal Voltage(V) and Discharge Time



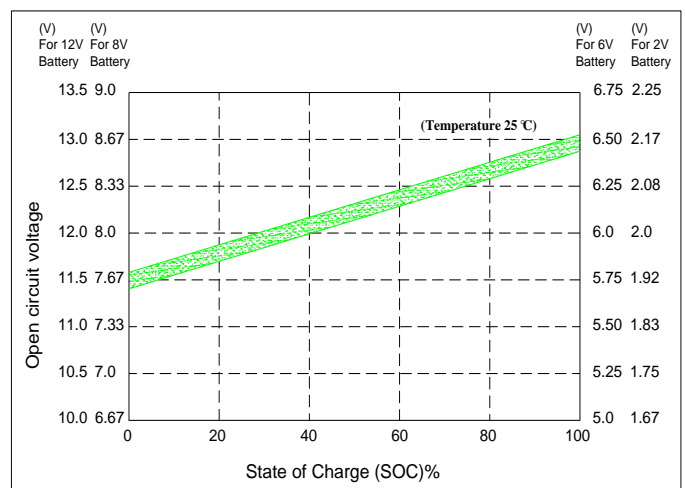
Duration of discharge vs. Discharge current



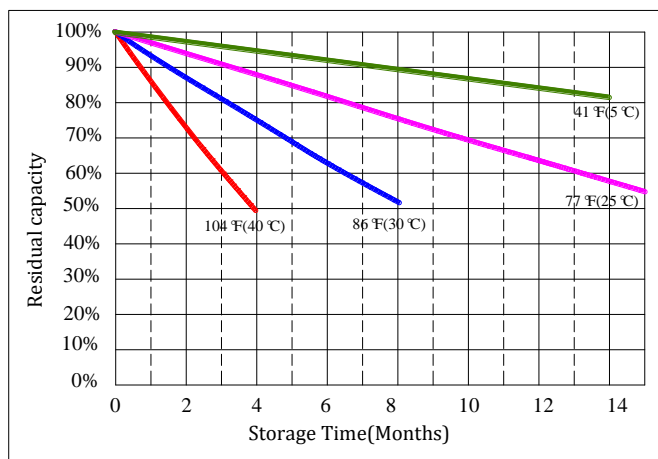
Percent Capacity vs. Temperature



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



Capacity Retention Characteristic



Cycle Life vs. Depth of Discharge(DOD)

