



## DC105-12

**105AH@20HR**

**12-Volt**

**DEEP CYCLE**

**Maintenance-Free  
Sealed AGM Battery**

### Nominal Specifications

<b>Battery Model</b>	<b>DC105-12</b>	<b>Rated Capacity</b>	<b>105AH/20HR</b>
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### Mechanical Specifications

<b>Group Size</b>	27		
<b>Overall Height (H)</b>	215±2mm	8.46"	
<b>Container Height (h)</b>	211±2mm	8.31"	
<b>Length</b>	307±2mm	12.09"	
<b>Width</b>	169±2mm	6.65"	
<b>Weight</b>	Approx.30.6kg	67.46bs.	
<b>Terminal Type</b>	M8- Button Terminal		
<b>Terminal Torque</b>	9.6-10.7 N.m		
<b>Container Material</b>	ABS: Standard (UL 94-HB)		

### Temperature Range Specifications

<b>Operating Temperature Range</b>	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)
<b>Recommended Operating Temperature Range</b>	+74°F (23°C) to +80°F (27°C)
<b>Self-Discharge</b>	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.

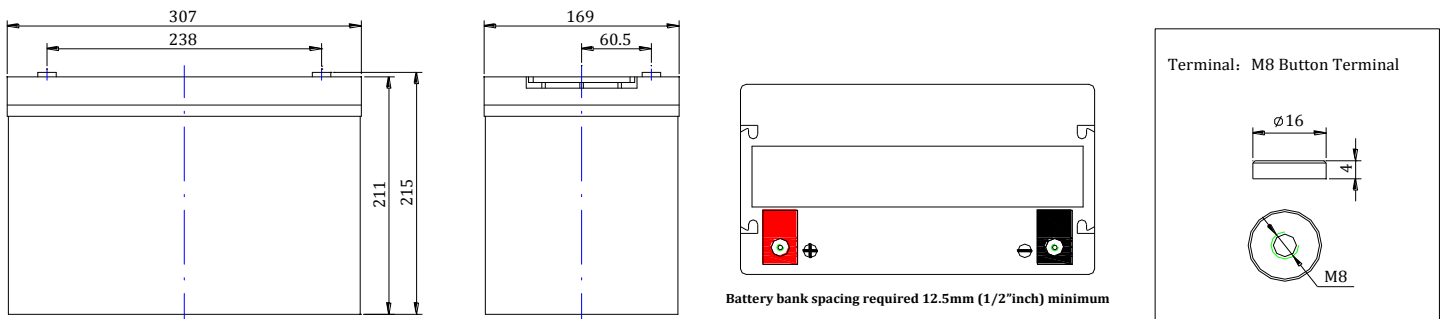
### Electrical Specifications

<b>C100</b>	116AH
<b>C20</b>	105AH
<b>C10</b>	90AH
<b>C5</b>	86AH
<b>CCA</b>	560A
<b>CA or MCA</b>	660A
<b>HPCA</b>	780A
<b>Max. Discharge Current</b>	1000A (5s)
<b>Internal Resistance</b>	3.8mΩ
<b style="color: red;">Reserve Capacity</b>	
<b>Reserve @25 AMPS</b>	170 Minutes
<b>Reserve @75 AMPS</b>	40 Minutes

### Charge Voltages

<b>Float Charging Voltage</b>	13.5 to 13.8 VDC/unit@ (25°C)	
<b>Equalization and Cycle Service Charging Voltage</b>	14.3 to 14.5 VDC/unit @ (25°C)	
<b>Maximum Charge Current(A)</b>	25A	
<b>Charging Temperature Compensation</b>	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)

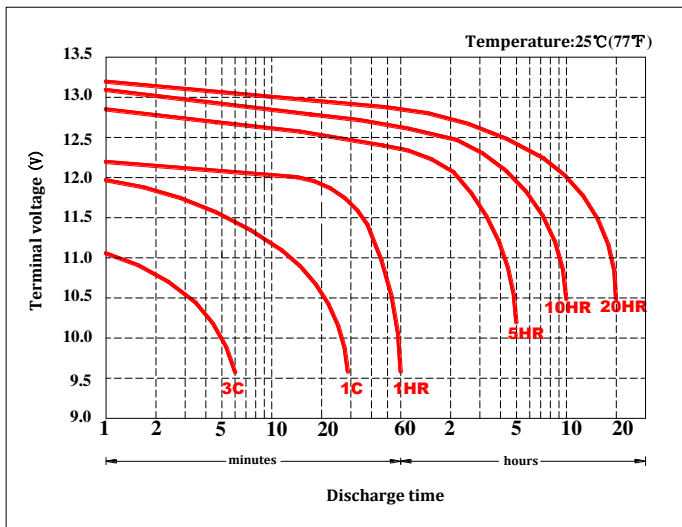
<b>Cut off voltage V/cell</b>	<b>15M</b>	<b>30M</b>	<b>45M</b>	<b>1H</b>	<b>2H</b>	<b>3H</b>	<b>5H</b>	<b>8H</b>	<b>10H</b>	<b>12H</b>	<b>20H</b>
<b>1.75V</b>	<b>145</b>	<b>93</b>	<b>69</b>	<b>56.8</b>	<b>30.1</b>	<b>22.6</b>	<b>15.9</b>	<b>10.9</b>	<b>9.00</b>	<b>7.67</b>	<b>5.25</b>

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

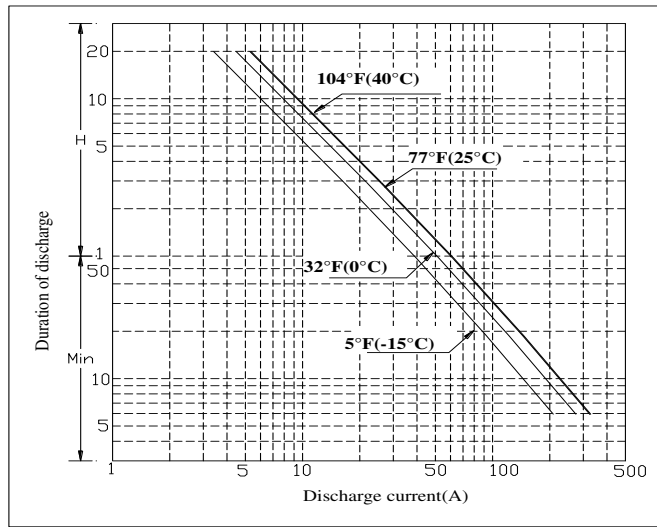


# DC105-12 DATA SHEET

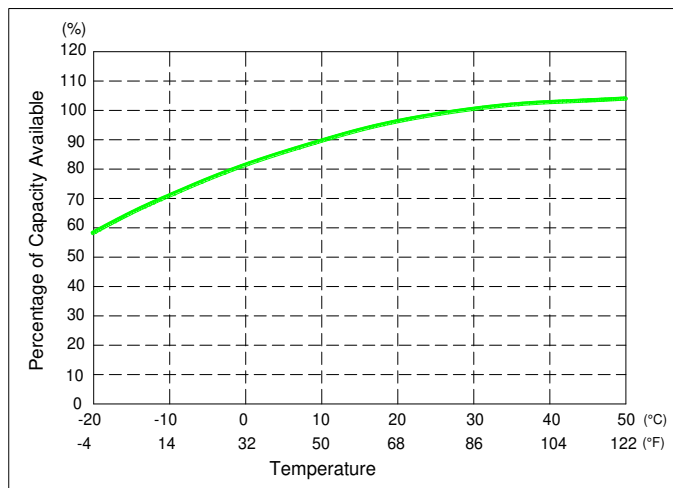
## Terminal Voltage(V) and Discharge Time



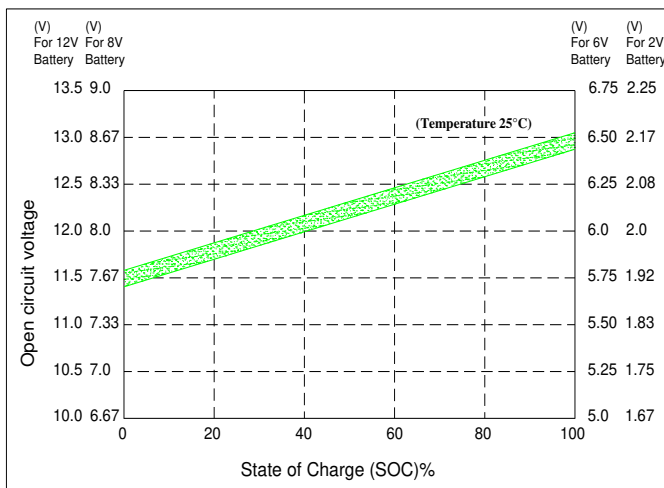
## Duration of discharge vs. Discharge current



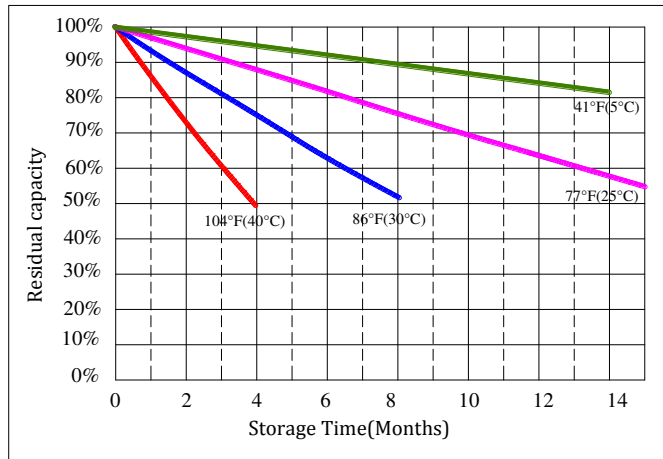
## Percent Capacity vs. Temperature



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



## Capacity Retention Characteristic



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

