



## DC105-12

**105AH@20HR**

**12-Volt**

**DEEP CYCLE**

**Maintenance-Free  
Sealed AGM Battery**

### Nominal Specifications

|               |          |                |            |
|---------------|----------|----------------|------------|
| Battery Model | DC105-12 | Rated Capacity | 105AH/20HR |
|---------------|----------|----------------|------------|

### Mechanical Specifications

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

### Electrical Specifications

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

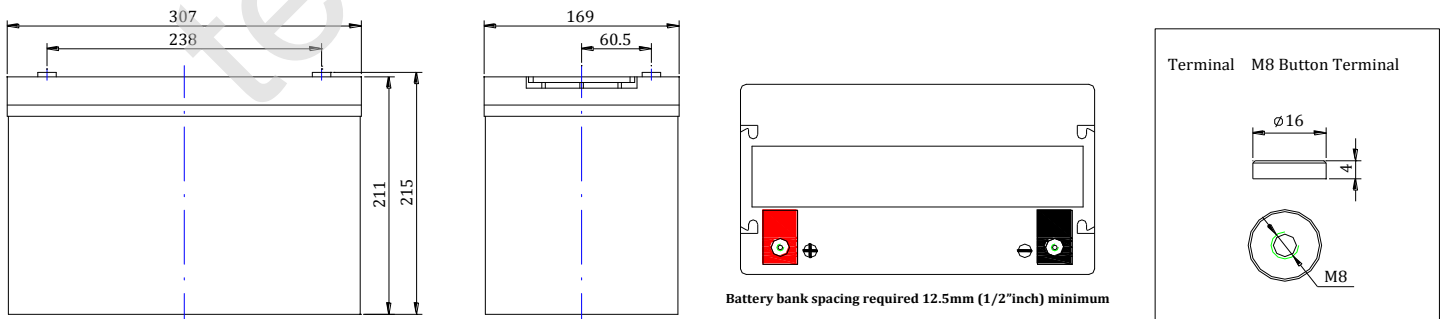
### Temperature Range Specifications

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

### 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)                       | 25A                            |            |
| Charging Temperature Compensation               | Cycle use                      | -4mV/cell/ |
|   | Float use                      | -3mV/cell/ |

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



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

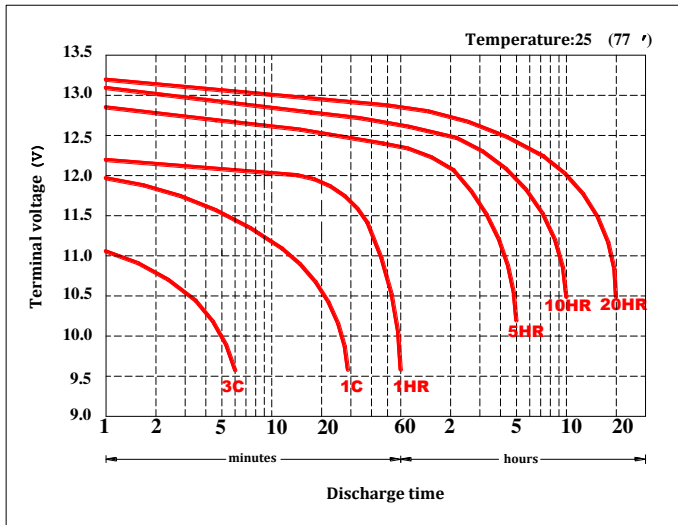
|                        |     |     |     |      |      |      |      |      |      |      |      |
|------------------------|-----|-----|-----|------|------|------|------|------|------|------|------|
| Cut off voltage V/cell | 15M | 30M | 45M | 1H   | 2H   | 3H   | 5H   | 8H   | 10H  | 12H  | 20H 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

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

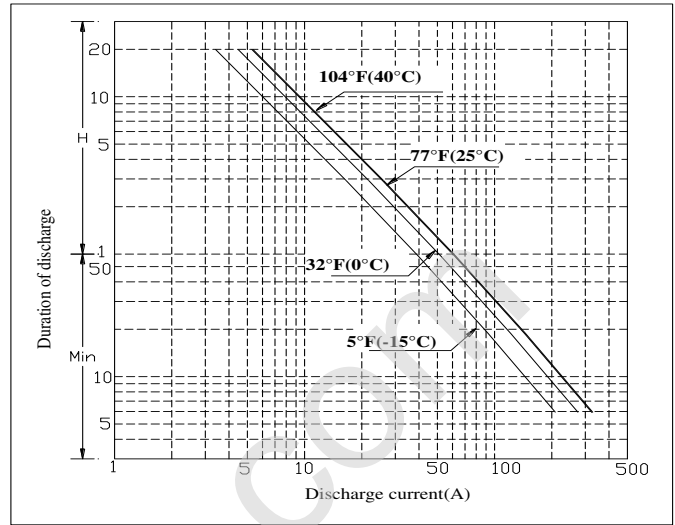


# DC105-12 DATA SHEET

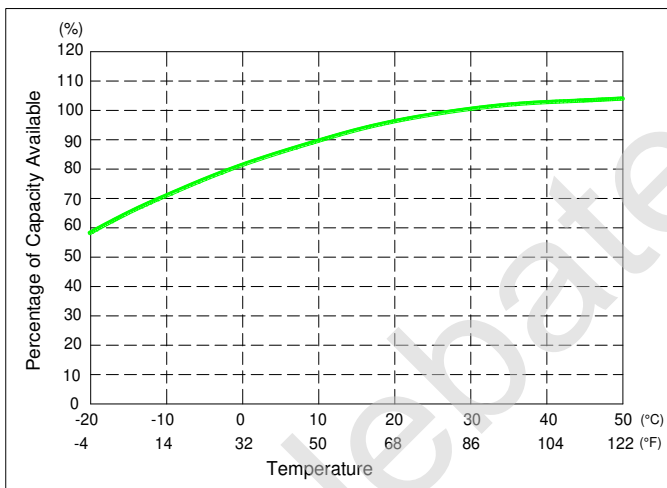
## Terminal Voltage(V) and Discharge Time



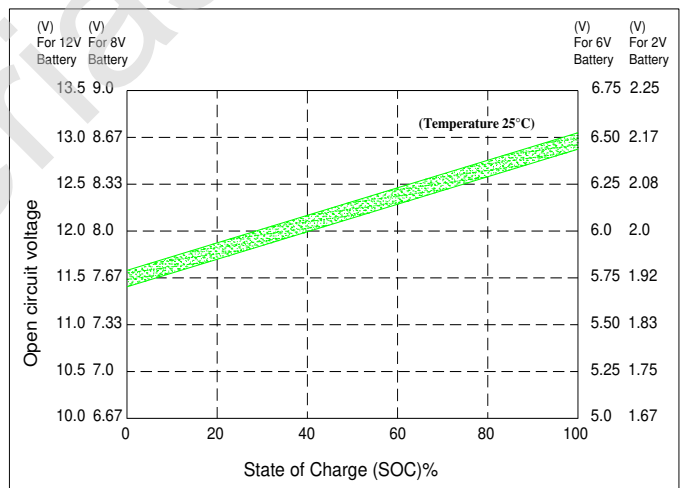
## Duration of discharge vs. Discharge current



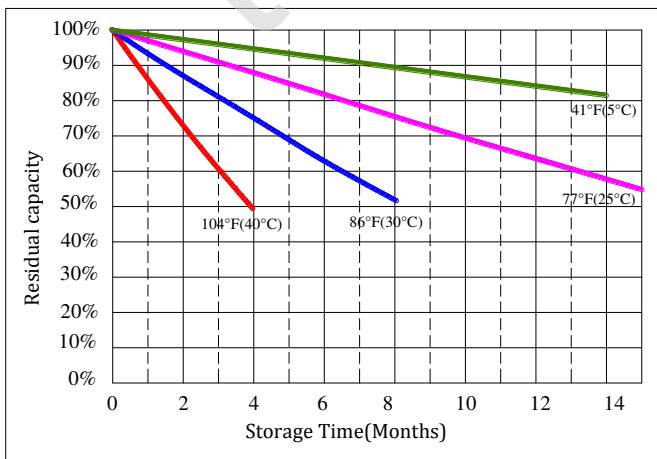
## Percent Capacity vs. Temperature



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



## Capacity Retention Characteristic



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

