# TECHNICAL DATA SHEET

## DGY12-69

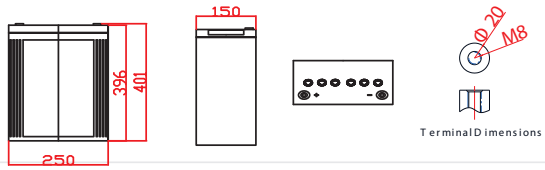

### Applications

CYCLIC STATIONARY SOLAR MARINE

### General Features

- Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- Relatively rich electrolyte, high temperature and low temperature performance is superior
- Long cycle life, excellent deep cycle discharge ability
- Excellent charge acceptance ability
- Precision sealing technology
- Long life

Dimension: 250(L)×150(W) ×396(H)×401TH) Unit: mm




### Applications

- Solar / wind energy and other new energy storage
- UPS/EPS
- Power systems
- Telecommunications system
- Emergency lighting、Auto control system
- Other general purpose

### Specification

| | |
|---|---|
| Nominal Voltage | 12V |
| Nominal Capacity | 87.6 Ah |
| Design life | 15 years |
| Terminal | M8 |
| Approx. Weight | Approx 30.4kg (67.1lbs) |
| Container Material | ABS |
| Rated Capacity | 87.6Ah 20Hour Rate<br>78.8Ah 10Hour Rate<br>71.1Ah 5Hour Rate<br>48.4Ah 1Hour Rate |
| Internal resistance | Full charged at 25°C: 8.4 mΩ |
| Max. Discharge Current | 830A(5S) |
| Operating Temperature | Discharge: -40 ~60℃(-40~ 140°F)<br>Charge: -20 ~50℃(-4~ 122°F)<br>Storage: -20 ~50℃(-4~ 122°F) |
| Charge Method (25 °C) | Charge current: Max. 17.5A；Recom.7.0A<br>Float Charge:13.5-13.8V,recom.13.8V(-18mV/ °C)<br>Equalize charge:13.8-14.1V,recom.14.1V(-24mV/ °C)<br>Cycle charge:14.4-15.0V,recom.14.7V(-30mV/ °C) |
| Self discharge | 2% of capacity declined per month at 25°C |

Nijverheidslaan +50/56, B-8540 Deerlijk - BELGIUM
Tel +32 56 617 977 - Fax +32 56 617 955
info@batterysupplies.be - www.batterysupplies.be

BATTERY SUPPLIES

# TECHNICAL DATA SHEET

## DGY12-69

### Constant Current Discharge Characteristics Unit: A (25℃, 77℉)

| F.V/Time | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.60V | 141.64 | 114.89 | 75.28 | 51.88 | 28.59 | 21.53 | 17.18 | 14.98 | 9.73 | 8.09 | 4.51 |
| 1.65V | 134.03 | 109.90 | 72.39 | 50.14 | 27.80 | 20.88 | 16.71 | 14.59 | 9.63 | 8.01 | 4.43 |
| 1.70V | 123.28 | 102.82 | 69.25 | 48.40 | 27.02 | 20.30 | 16.26 | 14.21 | 9.50 | 7.88 | 4.38 |
| 1.75V | 112.79 | 95.74 | 66.10 | 46.66 | 25.94 | 19.70 | 15.84 | 13.86 | 9.36 | 7.77 | 4.33 |
| 1.80V | 102.03 | 88.39 | 63.21 | 44.92 | 25.02 | 19.10 | 15.40 | 13.50 | 9.21 | 7.67 | 4.28 |
| 1.85V | 83.41 | 73.44 | 54.56 | 40.29 | 22.92 | 17.65 | 14.30 | 12.60 | 8.63 | 7.22 | 4.07 |

### Constant Power Discharge Characteristics Unit: W/cell (25℃, 77℉)

| F.V/Time | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.60V | 241.41 | 201.95 | 137.65 | 88.90 | 54.78 | 41.32 | 33.19 | 27.85 | 19.13 | 15.88 | 8.91 |
| 1.65V | 230.50 | 194.29 | 133.47 | 86.35 | 53.16 | 40.39 | 32.50 | 27.39 | 18.92 | 15.69 | 8.80 |
| 1.70V | 218.66 | 186.39 | 129.06 | 84.03 | 51.76 | 39.23 | 31.57 | 26.69 | 18.71 | 15.51 | 8.70 |
| 1.75V | 203.80 | 175.95 | 124.65 | 81.47 | 50.14 | 38.30 | 30.87 | 26.23 | 18.48 | 15.32 | 8.61 |
| 1.80V | 187.79 | 164.81 | 120.24 | 78.69 | 48.75 | 37.37 | 30.18 | 25.53 | 18.22 | 15.13 | 8.52 |
| 1.85V | 156.22 | 138.58 | 104.69 | 71.03 | 44.80 | 34.59 | 28.09 | 23.91 | 17.13 | 14.28 | 8.10 |

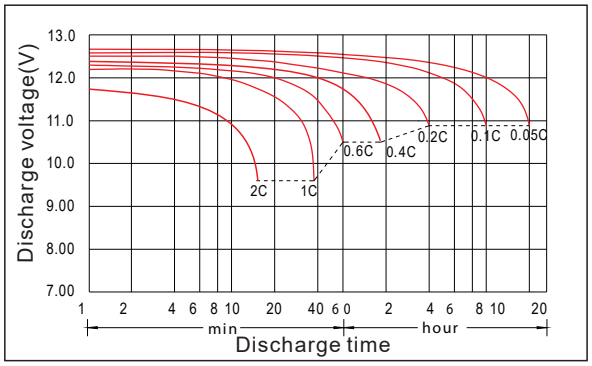
Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

Nijverheidslaan +50/56, B-8540 Deerlijk - BELGIUM
Tel +32 56 617 977 - Fax +32 56 617 955
info@batterysupplies.be - www.batterysupplies.be

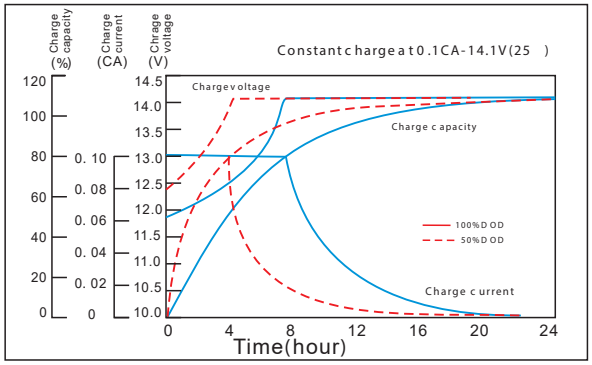
# TECHNICAL DATA SHEET

## DGY12-69

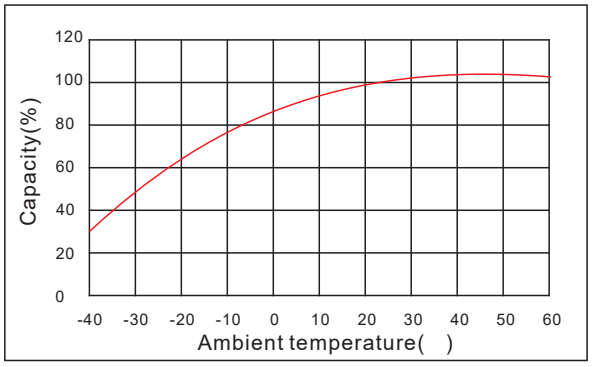
### Discharge characteristic



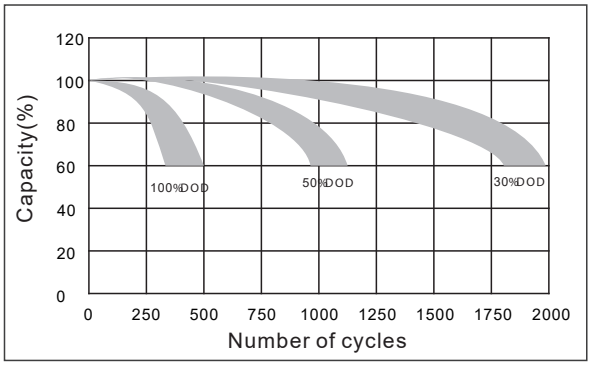

### Charging characteristic



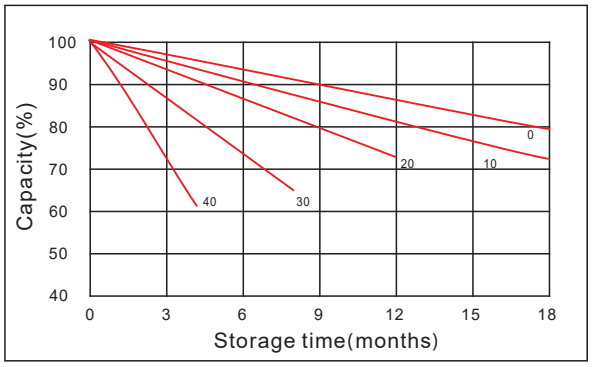

### The effect of temperature on capacity



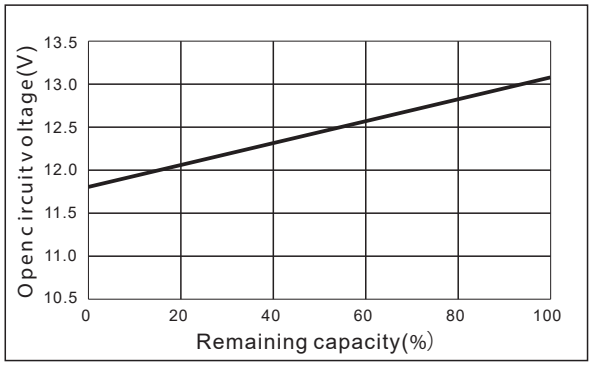

### The effect of discharge depth on cycle life




### Curves of self-discharge




### Curves of open circuit voltage vs. capacity





Nijverheidslaan +50/56, B-8540 Deerlijk - BELGIUM
Tel +32 56 617 977 - Fax +32 56 617 955
info@batterysupplies.be - www.batterysupplies.be


BATTERY SUPPLIES