

DEEP CYCLE GEL BATTERY

MG65-12

Applications

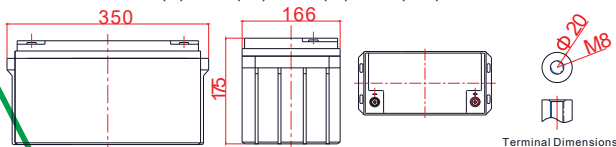
- › Solar / wind energy and other new energy storage
- › UPS/EPS
- › Power systems
- › Telecommunications system
- › Emergency lighting, Auto control system
- › Other general purpose

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: 350(L)×166(W)×175(H)×175(TH) Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	65Ah
Design life	12 years
Terminal	M8
Approx. Weight	Approx 21.0kg (46.3lbs)
Container Material	ABS
Rated Capacity	65.0Ah 10Hour Rate (6.50A to 10.8V)
	51.3Ah 3Hour Rate (17.1A to 10.8V)
	41.7Ah 1Hour Rate (41.7A to 10.5V)
Internal resistance	Full charged at 25°C: 8.2 mΩ
Max. Discharge Current	780A(5S)
Operating Temperature	Discharge: -40 ~60□ (-40~ 140°F)
	Charge: -20 ~50□ (-4~ 122°F)
	Storage: -20 ~50□ (-4~ 122°F)
Charge Method (25 °C)	Charge current: Max. 16.3A ; Recom.6.5A
	Float Charge:13.5-13.8V,recom.13.8V(-18mV/ °C)
	Equalize charge:13.8-14.1V,recom.14.1V(-24mV/ °C)
Self discharge	Cycle charge:14.4-15.0V,recom.14.7V(-30mV/ °C)
	3% of capacity declined per month at 25°C

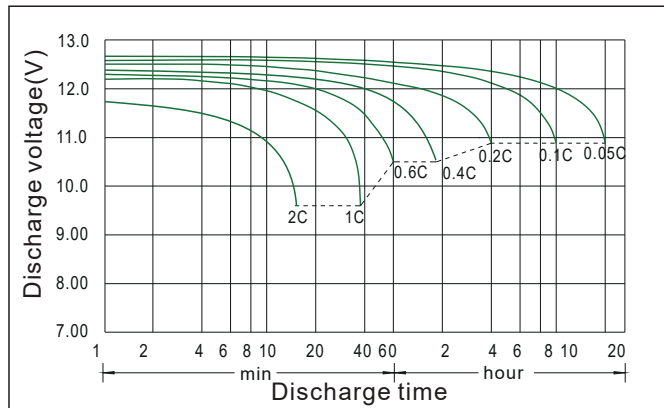
Constant Current Discharge Characteristics Unit: A (25□, 77□)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	119	72.6	42.9	24.6	17.9	12.0	7.87	6.73	3.54
1.65V	116	71.4	42.6	24.5	17.7	11.9	7.80	6.66	3.52
1.70V	113	70.1	42.3	24.3	17.4	11.7	7.74	6.60	3.50
1.75V	110	69.5	41.7	23.9	17.2	11.6	7.68	6.53	3.49
1.80V	102	66.5	40.6	23.5	17.1	11.3	7.62	6.50	3.47
1.85V	91.1	60.7	37.6	22.3	16.1	10.7	7.30	6.27	3.41

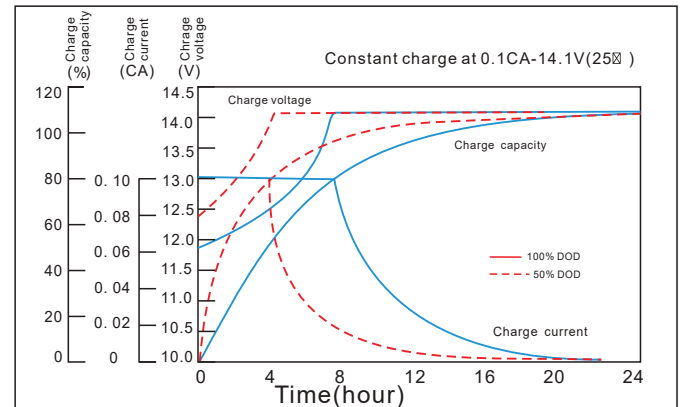
Constant Power Discharge Characteristics Unit: W/cell (25□, 77□)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	210	131	81.1	46.5	34.0	22.7	15.3	12.9	7.01
1.65V	207	130	80.5	46.4	33.5	22.6	15.2	12.8	6.97
1.70V	204	130	79.8	46.2	33.3	22.4	15.1	12.7	6.94
1.75V	203	130	79.2	45.9	33.1	22.3	15.0	12.5	6.91
1.80V	192	126	78.6	45.8	33.0	22.0	14.9	12.4	6.88
1.85V	171	116	73.0	43.8	31.4	21.0	14.3	12.2	6.81

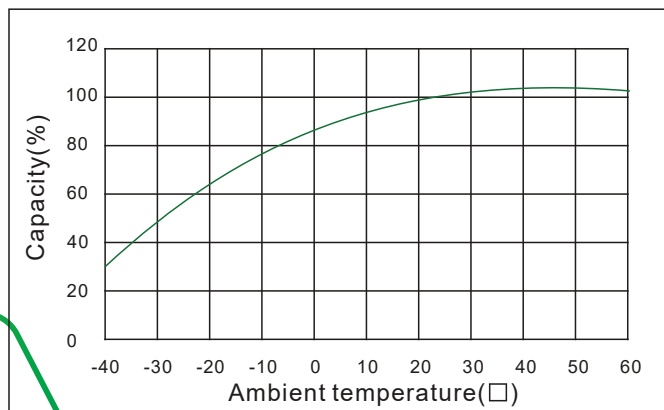
Discharge characteristic



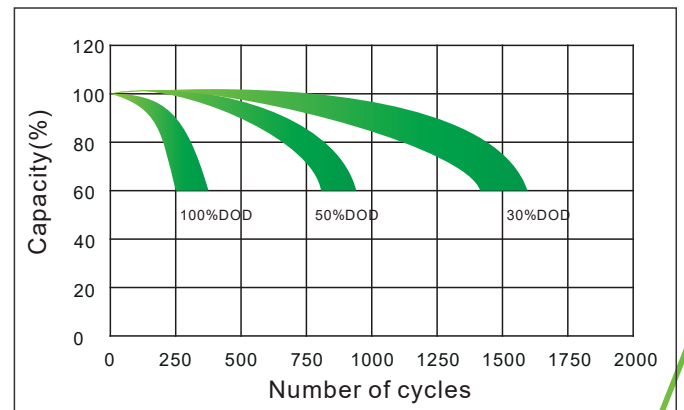
Charging characteristic



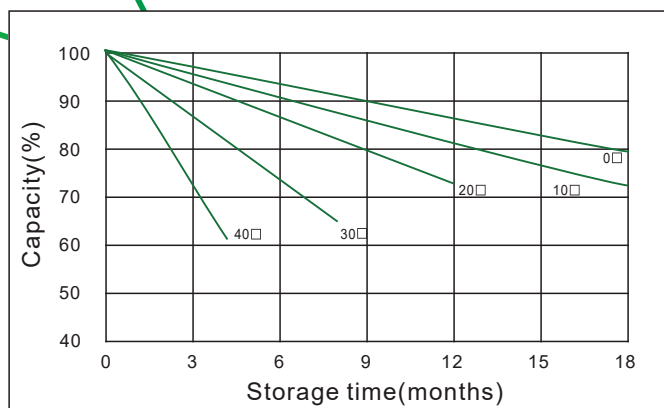
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

