

DEEP CYCLE GEL BATTERY

MG5-12

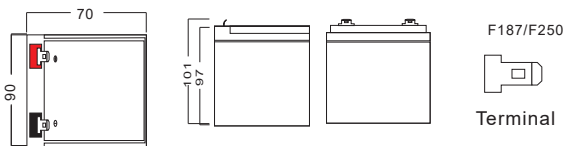
Applications

- › UPS/EPS
- › Power systems
- › Telecommunications system
- › Emergency lighting, Auto control system
- › Solar/wind generating storage cyclic
- › Other general purpose

- › High corrosion resistant performance: Pb-Ca multi-alloy grid
- › High energy density and power density
- › Optimized capability of instant high-current discharging
- › Excellent charge acceptance ability
- › Excellent deep cycle discharge capability
- › Strong high and low temperature performance
- › Precision sealing technology



Dimension: 90(L)×70(W)×97(H)×101(TH) Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	5.0Ah
Design life	5 years
Terminal	F187/F250
Approx. Weight	Approx1.58kg (3.48lbs)
Container Material	ABS
Rated Capacity	5.00Ah 20Hour Rate (0.25A to 10.5V)
	3.90Ah 3Hour Rate (1.30A to 10.5V)
	3.30Ah 1Hour Rate (3.30A to 9.60V)
Internal resistance	Full charged at 25°C: 40.0 mΩ
Max. Discharge Current	75A(5S)
Operating Temperature	Discharge: -20 ~50°C(-4~ 122°F)
	Charge: -20 ~50°C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge current:	Max.1.25A ; Recom.0.50A
Charge Method (25 °C)	Float Charge:13.5-13.8V,recom.13.5V(-18mV/ °C)
	Equalize charge:13.8-14.1V,recom.14.1V(-24mV/ °C)
	Cycle charge:14.4-15.0V,recom.14.4V(-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C

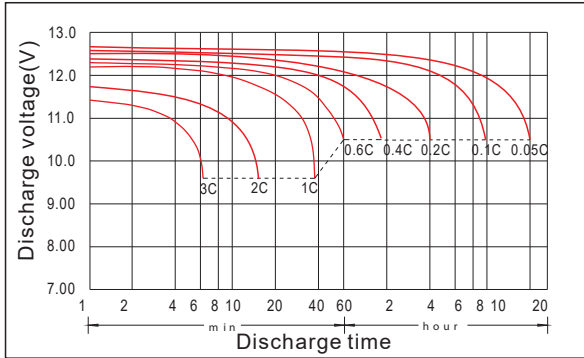
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	19.8	13.0	9.65	6.33	3.30	1.89	1.38	1.11	0.940	0.620	0.495	0.265
1.65V	19.7	12.4	8.85	6.01	3.10	1.82	1.34	1.07	0.920	0.610	0.490	0.260
1.70V	16.1	11.7	8.25	5.82	3.00	1.78	1.32	1.02	0.910	0.600	0.480	0.255
1.75V	15.0	11.1	7.70	5.69	2.90	1.74	1.30	1.00	0.870	0.585	0.470	0.250
1.80V	13.8	10.5	7.15	5.50	2.80	1.69	1.23	0.980	0.835	0.570	0.460	0.240

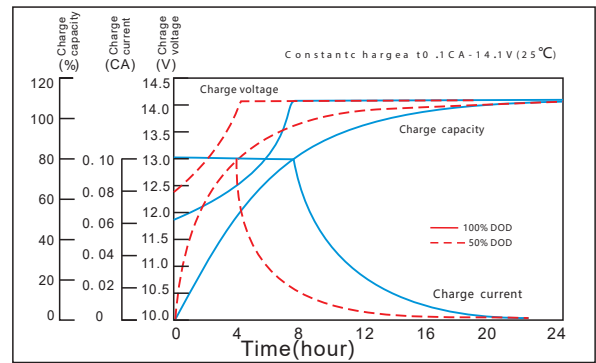
Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	37.2	23.3	17.7	10.7	6.05	3.54	2.61	2.09	1.78	1.17	0.959	0.525
1.65V	34.3	22.1	16.6	10.6	5.69	3.41	2.53	2.03	1.74	1.15	0.941	0.511
1.70V	31.3	21.4	15.8	10.6	5.52	3.34	2.49	1.93	1.69	1.14	0.933	0.507
1.75V	28.4	20.8	15.3	10.5	5.36	3.27	2.46	1.90	1.66	1.09	0.912	0.496
1.80V	25.5	20.1	14.6	10.4	5.28	3.24	2.39	1.88	1.62	1.06	0.893	0.493

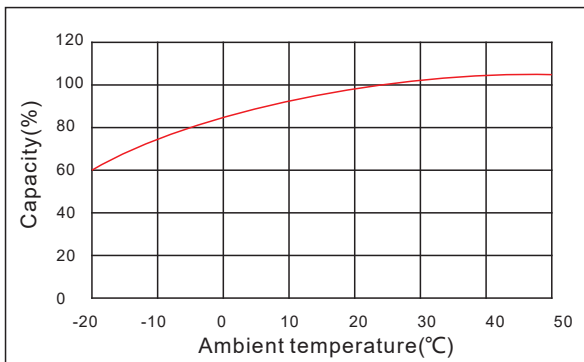
Discharge characteristic



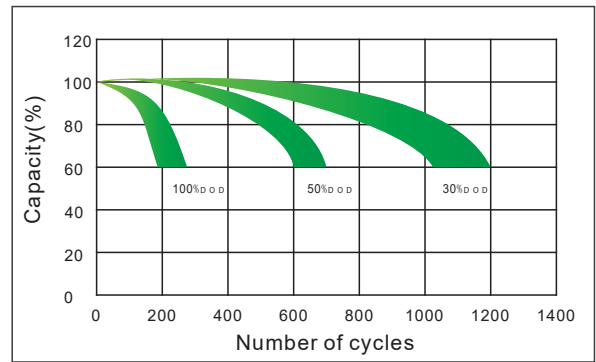
Charging characteristic



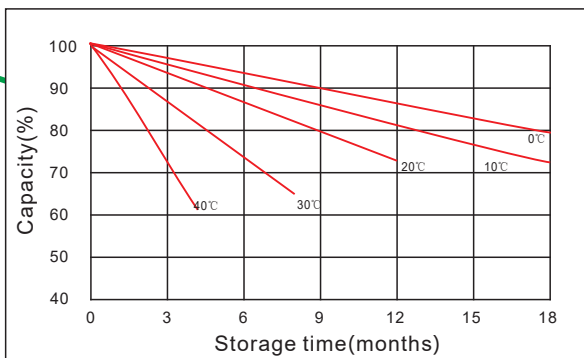
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



The effect of temperature on float life

