

# MOTTECH

## MT 7AH 12V

## MT Series AGM lead-acid battery

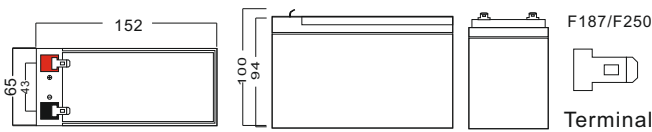


### General Features

- › 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: 152(L)×65(W)×94(H)×100(TH) 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	7Ah
Design life	10 years
Terminal	F250
Approx. Weight	Approx 1.85kg
Container Material	ABS
Rated Capacity	7.00Ah 20Hour Rate (0.35A to 10.5V)
	5.40Ah 3Hour Rate (1.80A to 10.5V)
	4.57Ah 1Hour Rate (4.57A to 9.6V)
Internal resistance	Full charged at 25°C: 30.0 mΩ
Max. Discharge Current	108A(5S)
Operating Temperature	Discharge: -40 ~60°C(-40~ 140°F)
	Charge: -20 ~50°C(-4~ 122°F)
	Storage: -20 ~50°C(-4~ 122°F)
Charge current:	Max. 1.80A ; Recom.0.72A
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)

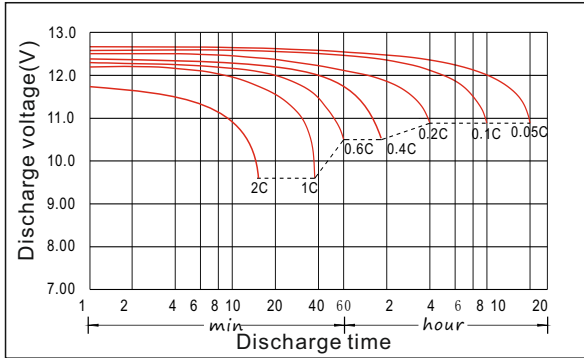
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	27.2	17.8	13.4	8.77	4.57	2.62	1.91	1.54	1.30	0.860	0.697	0.372
1.65V	27.0	17.0	12.3	8.33	4.29	2.52	1.86	1.48	1.27	0.846	0.687	0.365
1.70V	22.1	16.1	11.5	8.07	4.16	2.46	1.83	1.41	1.26	0.832	0.676	0.358
1.75V	20.6	15.2	10.6	7.89	4.02	2.41	1.80	1.39	1.21	0.811	0.659	0.351
1.80V	18.9	14.4	9.92	7.63	3.88	2.35	1.70	1.36	1.16	0.790	0.650	0.337

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

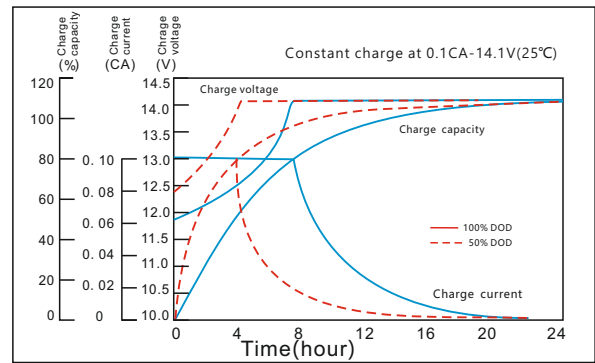
F.V/Time	5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	51.0	31.9	24.6	14.8	8.43	4.90	3.62	2.91	2.47	1.62	1.35	0.740
1.65V	47.0	30.3	23.0	14.7	7.86	4.72	3.51	2.81	2.41	1.59	1.33	0.717
1.70V	42.9	29.3	21.9	14.7	7.63	4.63	3.45	2.67	2.34	1.58	1.31	0.712
1.75V	39.0	28.5	21.2	14.6	7.40	4.53	3.41	2.62	2.30	1.51	1.28	0.699
1.80V	35.0	27.6	20.2	14.4	7.29	4.49	3.31	2.60	2.25	1.47	1.26	0.694

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.

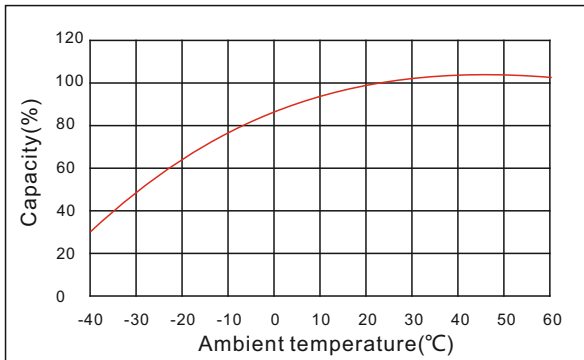
Discharge characteristic



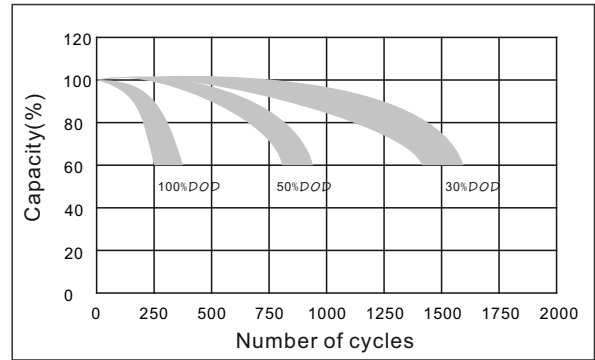
Charging characteristic



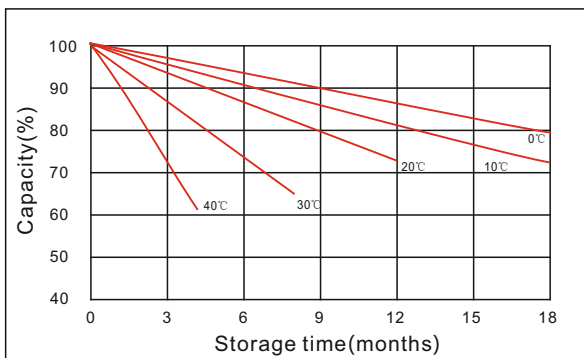
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

