



General Features

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



RoHS



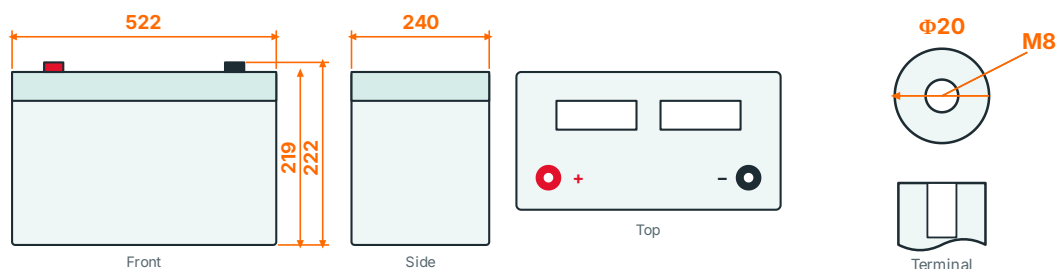
Applications

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

Specification

Nominal Voltage	12 V		
Nominal Capacity	200 Ah		
Design Life	10 years		
Terminal	M8		
Approx. Weight	Approx. 59.0 kg (130 lbs)		
Container Material	ABS		
Rated Capacity	200 Ah	10 Hour Rate	20.0 A to 10.8 V
	170.4 Ah	3 Hour Rate	56.8 A to 10.2 V
	140 Ah	1 Hour Rate	140 A to 9.6 V
Internal Resistance	Fully charged at 25°C: 4.0 mΩ		
Short-circuit Current	3000 A		
Operating Temperature	Discharge	-20 ~ 50°C (-4 ~ 122°F)	
	Charge	-20 ~ 50°C (-4 ~ 122°F)	
	Storage	-20 ~ 50°C (-4 ~ 122°F)	
Charge Method (25°C)	Charge current	Max. 50 A; recom. 20 A	
	Float	13.5–13.8 V, recom. 13.8 V (-18 mV/°C)	
	Equalize	13.8–14.1 V, recom. 14.1 V (-24 mV/°C)	
	Cycle	14.4–15.0 V, recom. 14.7 V (-30 mV/°C)	
Self Discharge	3% of capacity declined per month at 25°C		

Dimensions 522 (L) × 240 (W) × 219 (H) × 222 (TH) · Unit: mm

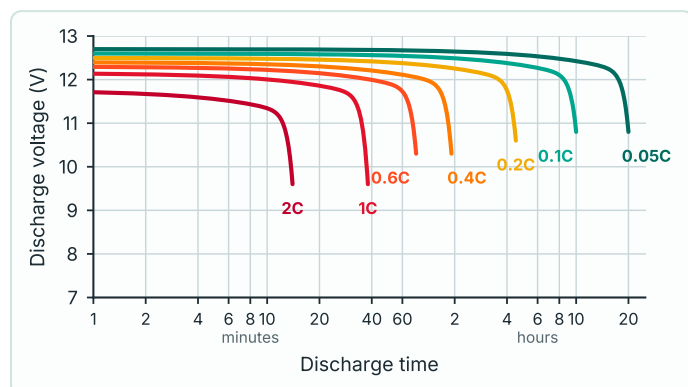


Constant Current Discharge Characteristics

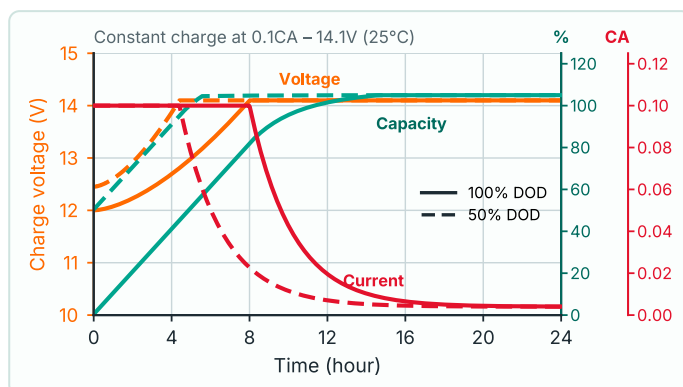
Unit: A (25°C, 77°F)

FV / Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	306	191	140	80.1	58.2	39.0	25.6	21.0	11.1
1.65V	301	188	139	79.7	57.5	38.7	25.4	20.8	11.0
1.70V	289	184	138	79.1	56.8	38.3	25.2	20.6	10.8
1.75V	266	183	136	77.9	56.1	37.8	25.0	20.4	10.6
1.80V	238	175	132	76.4	55.7	36.8	24.8	20.0	10.5
1.85V	212	160	123	72.6	52.5	34.9	23.8	19.4	10.2

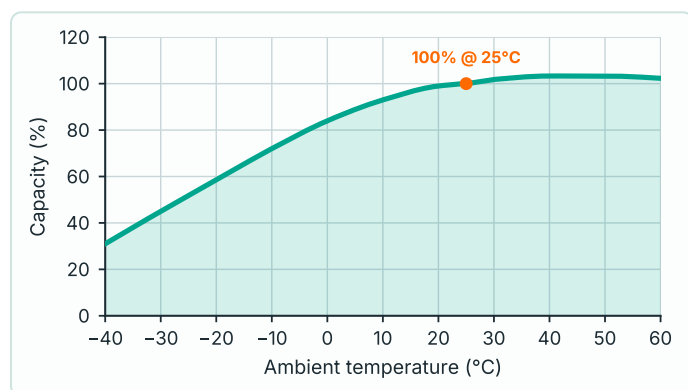
Discharge characteristic



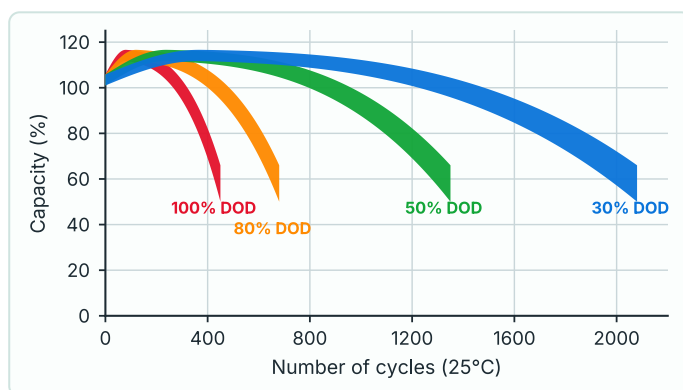
Charging characteristic



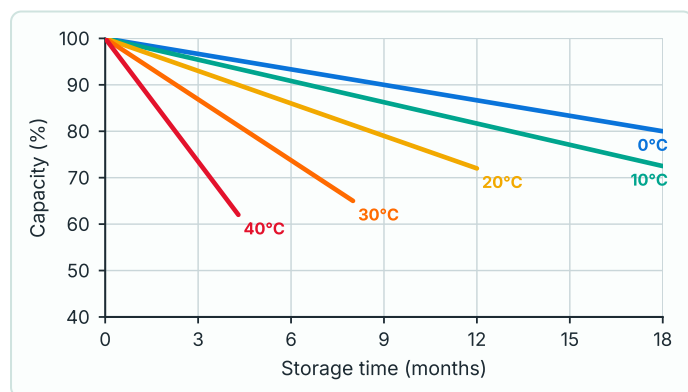
Effect of temperature on capacity



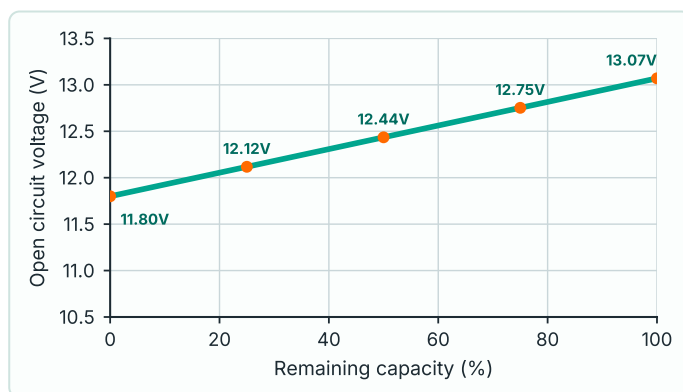
Effect of discharge depth on cycle life



Self-discharge curves



Open circuit voltage vs. capacity



Constant Power Discharge Characteristics

Unit: W/cell (25°C, 77°F)

FV / Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	520	374	274	158	115	76.8	50.8	41.6	22.0
1.65V	512	368	273	157	113	76.2	50.3	41.2	21.7
1.70V	491	361	271	156	112	75.4	50.0	40.8	21.4
1.75V	452	359	268	153	111	74.6	49.5	40.4	21.0
1.80V	404	343	260	151	110	72.4	49.1	39.6	20.7
1.85V	363	315	243	144	104	69.2	47.4	38.7	20.4

