



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



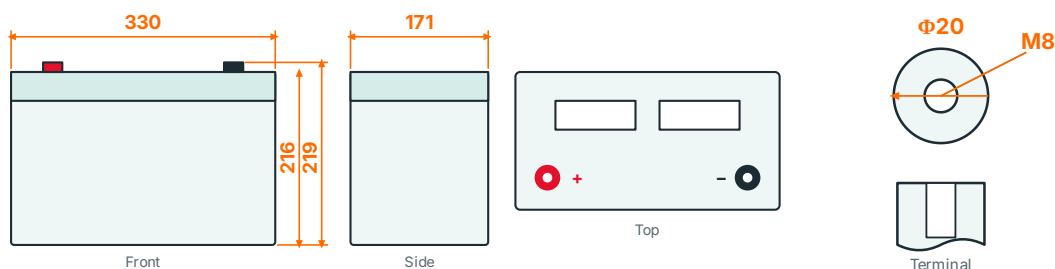
Applications

- ◆ 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	100 Ah		
Design Life	10 years		
Terminal	M8		
Approx. Weight	Approx. 29.5 kg (65.0 lbs)		
Container Material	ABS		
Rated Capacity	100 Ah	10 Hour Rate	10.0 A to 10.8 V
	78.9 Ah	3 Hour Rate	26.3 A to 10.8 V
	64.2 Ah	1 Hour Rate	64.2 A to 10.5 V
Internal Resistance	Fully charged at 25°C: 5.2 mΩ		
Max. Discharge Current	1200 A (5 s)		
Operating Temperature	Discharge	-40 ~ 60°C (-40 ~ 140°F)	
	Charge	-20 ~ 50°C (-4 ~ 122°F)	
	Storage	-20 ~ 50°C (-4 ~ 122°F)	
Charge Method (25°C)	Charge current	Max. 25.0 A; recom. 10.0 A	
	Float	13.5–13.8 V, recom. 13.5 V (-18 mV/°C)	
	Equalize	13.8–14.1 V, recom. 14.1 V (-24 mV/°C)	
	Cycle	14.4–15.0 V, recom. 14.4 V (-30 mV/°C)	
Self Discharge	3% of capacity declined per month at 25°C		

Dimensions 330 (L) × 171 (W) × 216 (H) × 219 (TH) · Unit: mm

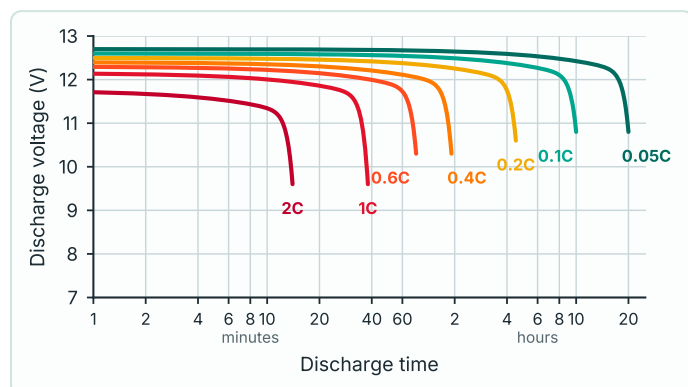


Constant Current Discharge Characteristics

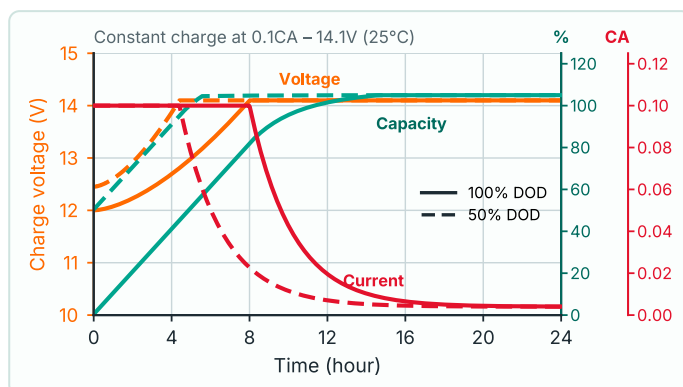
Unit: A (25°C, 77°F)

FV / Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	184	112	66.0	37.8	27.5	18.4	12.1	10.3	5.43
1.65V	178	110	65.6	37.6	27.2	18.2	12.0	10.2	5.40
1.70V	174	108	65.1	37.4	26.8	18.1	11.9	10.1	5.37
1.75V	169	107	64.2	36.8	26.5	17.9	11.8	10.0	5.35
1.80V	157	102	62.5	36.1	26.3	17.4	11.7	10.0	5.32
1.85V	140	93.3	57.9	34.3	24.8	16.5	11.2	9.65	5.23

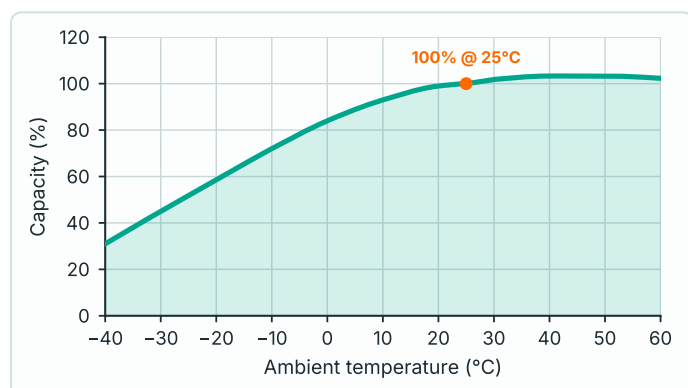
Discharge characteristic



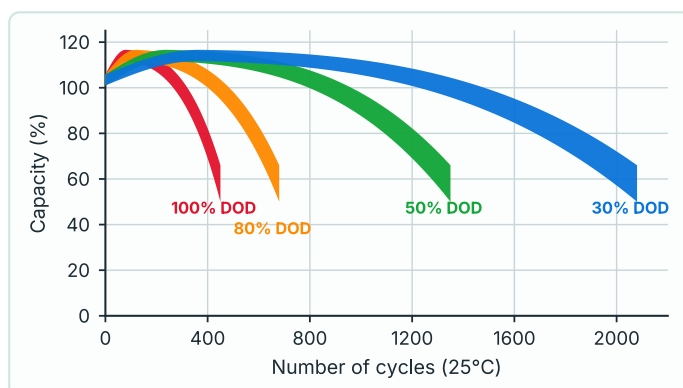
Charging characteristic



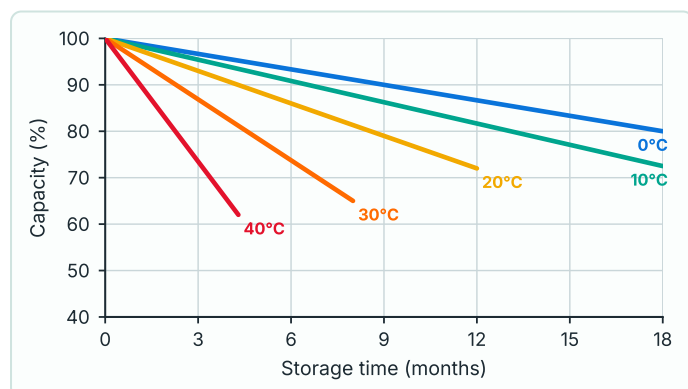
Effect of temperature on capacity



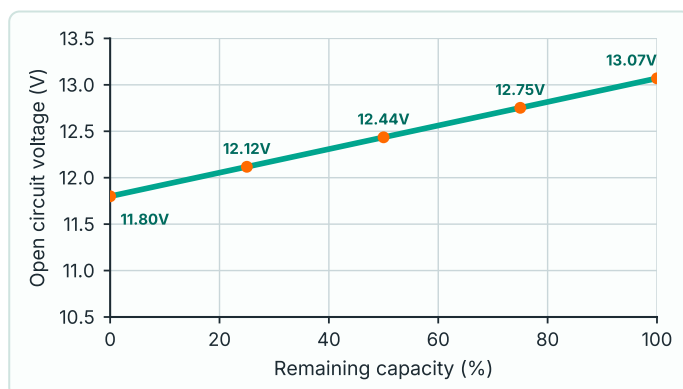
Effect of discharge depth on cycle life



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	323	202	125	71.5	52.2	35.0	23.5	19.9	10.7
1.65V	318	200	124	71.4	51.6	34.8	23.3	19.7	10.7
1.70V	314	200	123	71.1	51.3	34.5	23.2	19.5	10.6
1.75V	312	199	122	70.7	51.0	34.3	23.0	19.3	10.6
1.80V	295	194	121	70.5	50.8	33.9	22.9	19.1	10.5
1.85V	264	178	112	67.3	48.3	32.4	22.1	18.8	10.4

