



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



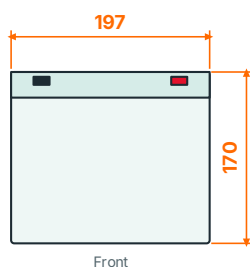
Applications

- ◆ 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	35 Ah		
Design Life	12 years		
Terminal	M6		
Approx. Weight	Approx. 12.0 kg (26.5 lbs)		
Container Material	ABS		
Rated Capacity	35.0 Ah	10 Hour Rate	3.50 A to 10.8 V
	27.6 Ah	3 Hour Rate	9.21 A to 10.8 V
	22.5 Ah	1 Hour Rate	22.5 A to 10.5 V
Internal Resistance	Fully charged at 25°C: 13.0 mΩ		
Max. Discharge Current	420 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. 8.75 A; recom. 3.5 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 197 (L) × 130 (W) × 170 (H) × 170 (TH) · Unit: mm



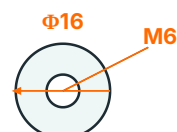
Front



Side



Top



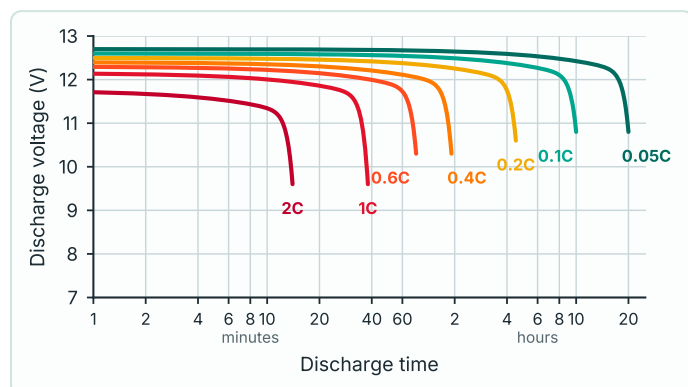
Terminal

Constant Current Discharge Characteristics

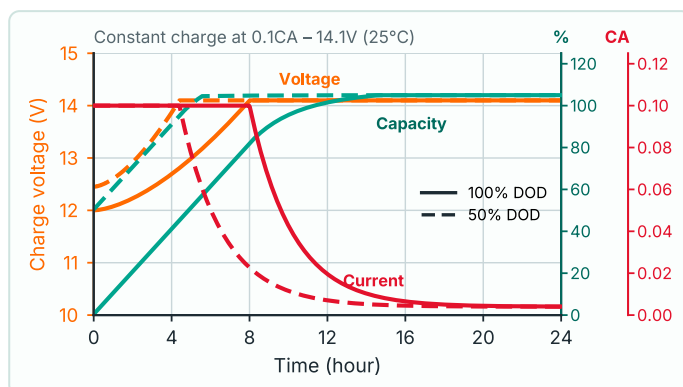
Unit: A (25°C, 77°F)

FV / Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	64.3	39.1	23.1	13.3	9.61	6.46	4.23	3.62	1.91
1.65V	62.4	38.4	22.9	13.2	9.51	6.38	4.20	3.58	1.90
1.70V	61.0	37.8	22.8	13.0	9.38	6.32	4.17	3.55	1.89
1.75V	59.0	37.4	22.5	12.8	9.28	6.25	4.14	3.52	1.88
1.80V	55.0	35.8	21.8	12.6	9.21	6.09	4.10	3.50	1.87
1.85V	49.0	32.7	20.3	12.0	8.68	5.78	3.93	3.37	1.83

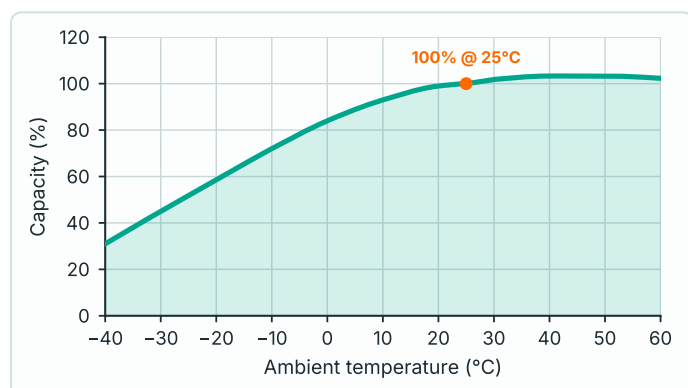
Discharge characteristic



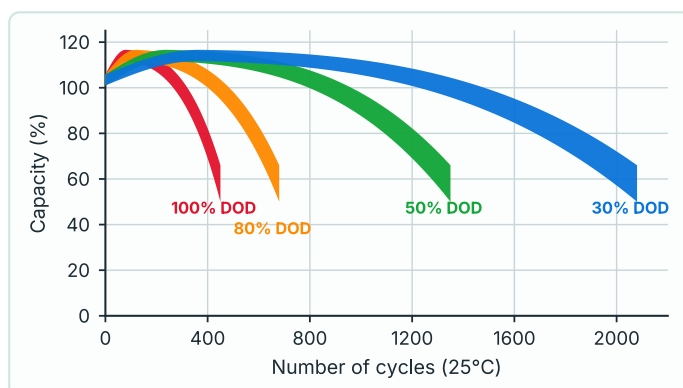
Charging characteristic



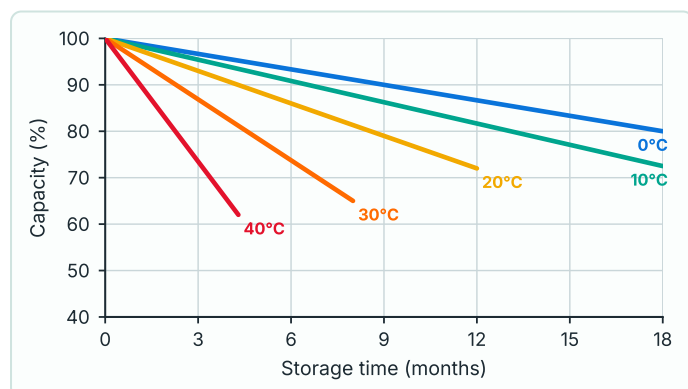
Effect of temperature on capacity



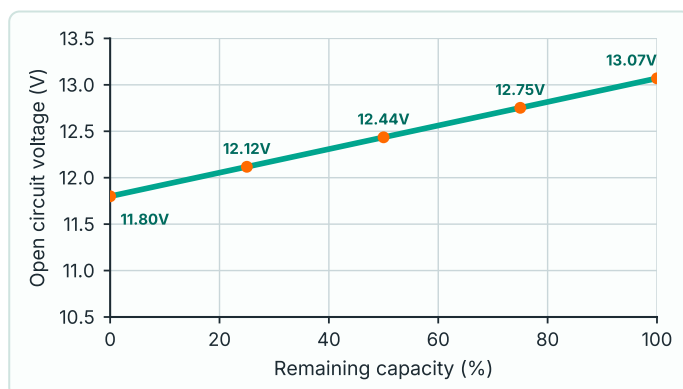
Effect of discharge depth on cycle life



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	113.5	70.7	43.7	25.0	18.2	12.2	8.23	6.97	3.78
1.65V	111.4	70.1	43.4	24.9	18.0	12.2	8.17	6.89	3.75
1.70V	110.3	70.1	43.0	24.9	17.9	12.1	8.13	6.83	3.73
1.75V	109.2	69.8	42.6	24.7	17.8	12.0	8.06	6.76	3.72
1.80V	103.3	68.1	42.3	24.7	17.8	11.9	8.00	6.68	3.70
1.85V	92.3	62.4	39.2	23.5	16.9	11.3	7.73	6.59	3.67

