



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	150 Ah
Design Life	10 years
Terminal	M8
Approx. Weight	Approx. 45.0 kg (99.2 lbs)
Container Material	ABS

Rated Capacity	150 Ah	10 Hour Rate	15.0 A to 10.8 V
	119 Ah	3 Hour Rate	39.5 A to 10.8 V
	96.2 Ah	1 Hour Rate	96.2 A to 10.5 V

Internal Resistance Fully charged at 25°C: **3.6 mΩ**

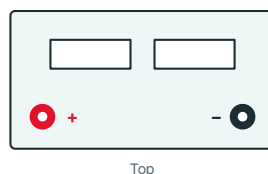
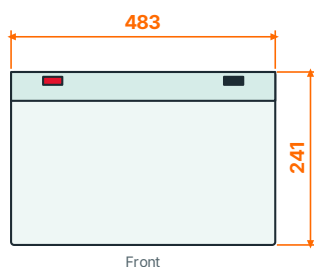
Max. Discharge Current **1800 A (5 s)**

Operating Temperature	Discharge	-40 ~ 60°C (-40 ~ 140°F)
	Charge	-20 ~ 50°C (-4 ~ 122°F)
	Storage	-20 ~ 50°C (-4 ~ 122°F)

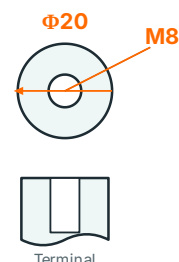
Charge Method (25°C)	Charge current	Max. 37.5 A; recom. 15.0 A
	Float	13.5~13.8 V, recom. 13.5 V (-18 mV/°C)
	Equalize	13.8~14.1 V, recom. 14.1 V (-24 mV/°C)
	Cycle	14.4~15.0 V, recom. 14.4 V (-30 mV/°C)

Self Discharge 3% of capacity declined per month at 25°C

Dimensions 483 (L) × 170 (W) × 241 (H) × 241 (TH) · Unit: mm



Top



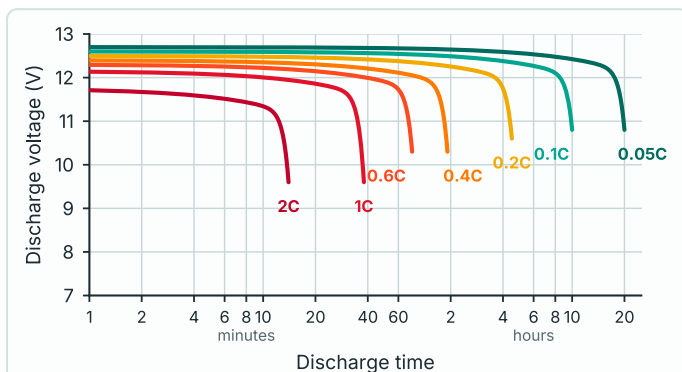
Terminal

Constant Current Discharge Characteristics

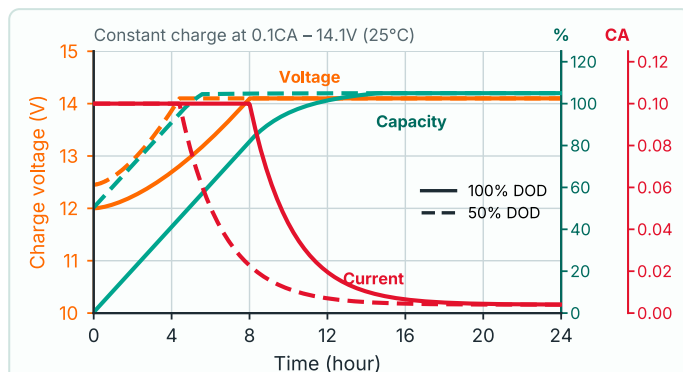
Unit: A (25°C, 77°F)

FV / Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	275	168	99.0	56.8	41.2	27.7	18.2	15.5	8.15
1.65V	267	165	98.4	56.5	40.8	27.4	18.0	15.4	8.10
1.70V	261	162	97.7	56.0	40.2	27.1	17.9	15.2	5.01
1.75V	253	160	96.2	55.2	39.8	26.8	17.7	15.1	5.00
1.80V	236	153	93.8	54.2	39.5	26.1	17.6	15.0	7.98
1.85V	210	140	86.9	51.4	37.2	24.8	16.8	14.5	7.85

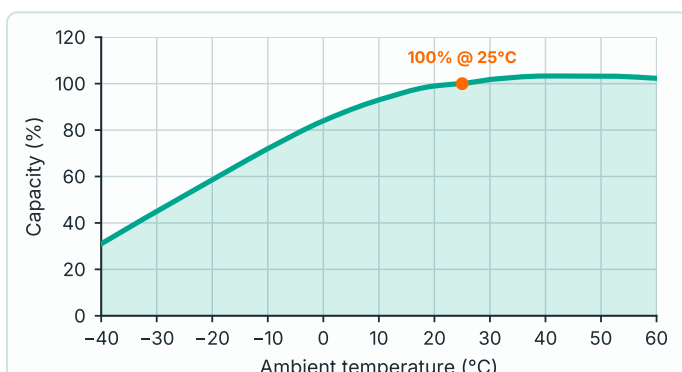
Discharge characteristic



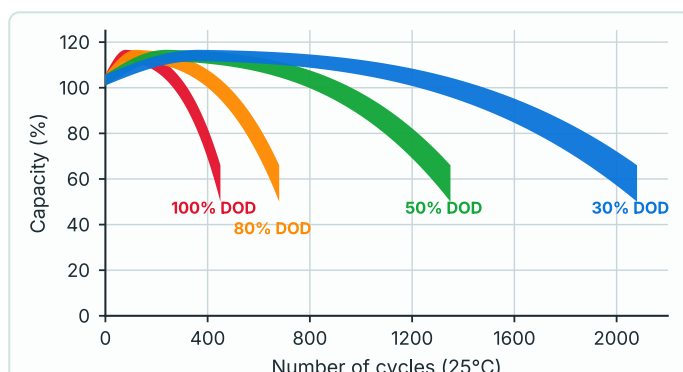
Charging characteristic



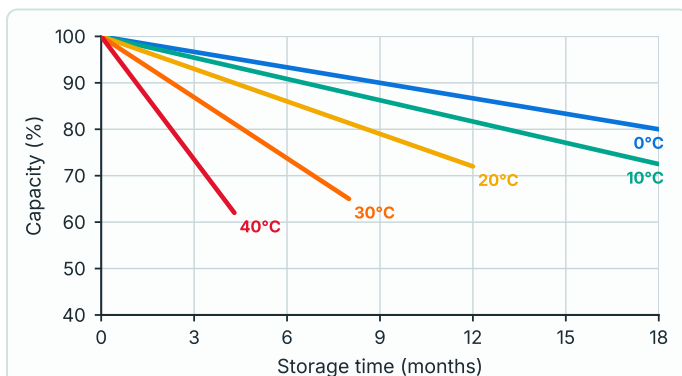
Effect of temperature on capacity



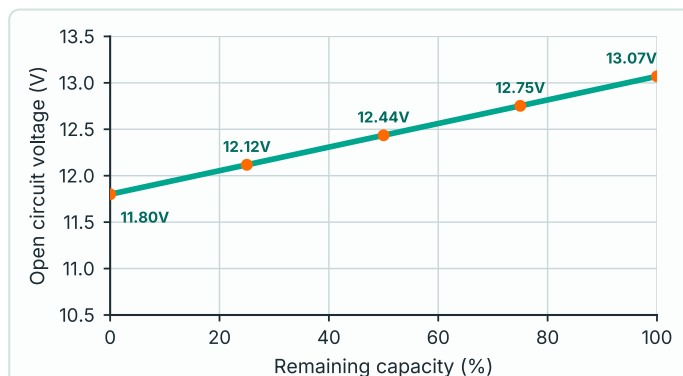
Effect of discharge depth on cycle life



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	485	303	187	107	78.4	52.4	35.3	29.9	16.1
1.65V	477	300	186	107	77.4	52.1	35.0	29.6	16.0
1.70V	471	300	184	107	76.9	51.7	34.9	29.3	16.0
1.75V	468	299	183	106	76.5	51.4	34.6	29.0	15.9
1.80V	443	292	181	106	76.2	50.9	34.3	28.7	15.8
1.85V	396	267	168	101	72.5	48.5	33.1	28.2	15.7

