



# OPZV2-300

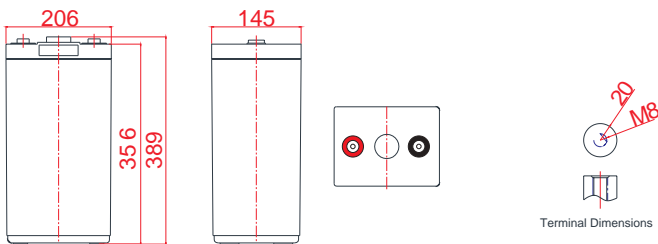


### General Features

- > Nanosilica colloidal electrolyte and tubular plate design to enhance battery performance
- > Tubular plate design makes long battery life
- > 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



Dimension: 145(L)x206(W) x35 6(H) x389(TH) Unit: mm



### Applications

- > Solar / wind energy and other new energy storage
- > Power systems
- > Telecommunications system
- > UPS/EPS
- > Auto control system
- > Other general purpose

### Specification

Nominal Voltage	2V	
Nominal Capacity	300Ah	
Design life	20 years	
Terminal	M8	
Approx. Weight	Approx 26.5kg (58.4lbs)	
Container Material	ABS	
Rated Capacity	300Ah	10Hour Rate (30.0A to 1.80V)
	227Ah	3Hour Rate (75.6A to 1.80V)
	167Ah	1Hour Rate (167A to 1.75V)
Internal resistance	Full charged at 25°C: 0.62 m	
Max. Discharge Current	2400A(5S)	
Operating Temperature	Discharge:	-40 ~60 (-40~ 140°F)
	Charge:	-20 ~50 (-4~ 122°F)
	Storage:	-20 ~50 (-4~ 122°F)
Charge current:	Max.60A Recom.30A	
Charge Method (25 °C)	Float Charge: 2.23-2.27V, recom.2.25V(-3mV/ °C)	
	Equalize charge:2.30-2.35V, recom.2.35V(-4mV/ °C)	
	Cycle charge:2.40-2.50V, recom.2.40V(-5mV/ °C)	
Self discharge	3%of capacity declined per month at 25°C	

### Constant Current Discharge Characteristics Unit: A ( 25 , 77 )

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	328	262	182 112		80.4	55.2	38.8	31.8	17.0
1.65V	313	250	179 110		79.4	54.4	38.2	31.6	16.9
1.70V	297	235	172 107		78.2	53.4	37.6	31.0	16.6
1.75V	280	219	167 104		77.0	52.2	37.2	30.6	16.4
1.80V	252	201	156 101		75.6	50.8	36.4	30.0	16.0
1.85V	213	179	146 97.0		72.6	49.0	35.4	29.4	15.6

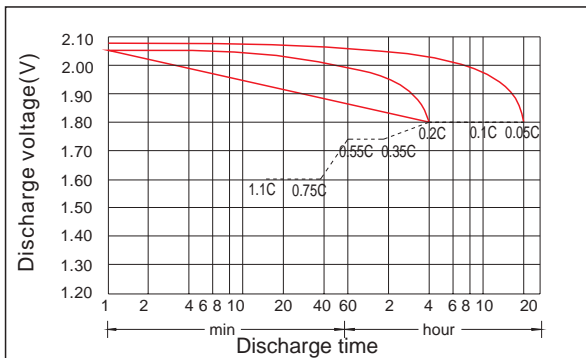
### Constant Power Discharge Characteristics Unit: W ( 25 , 77 )

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	655	520	353	220	169 113		81.0	67.2	36.0
1.65V	625	495	335	217	165 112		79.6	64.4	35.2
1.70V	597	474	325	213	160 109		78.0	64.2	34.4
1.75V	565	453	314	208	156 106		76.2	63.0	33.6
1.80V	537	436	315	201	151 103		74.2	61.4	32.8
1.85V	493	413	289	191	144 98		71.4	59.6	31.8

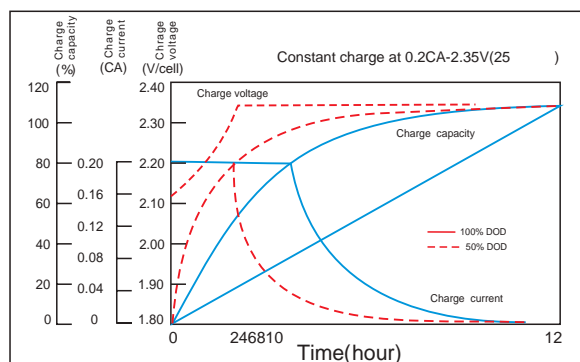


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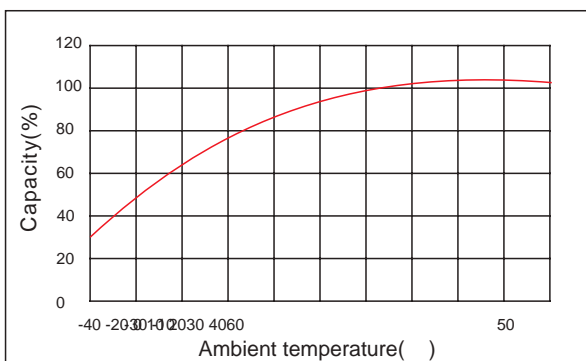
### Discharge characteristic



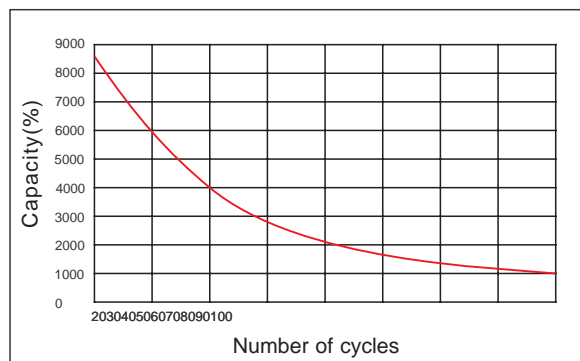
### Charging characteristic



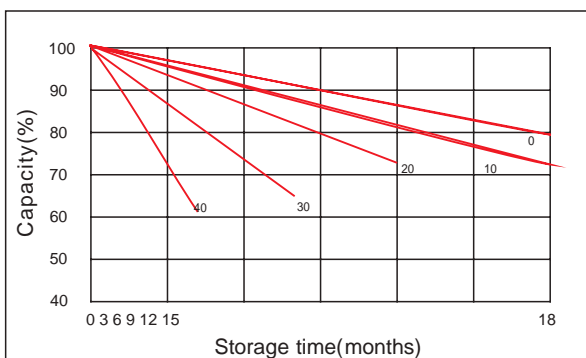
### The effect of temperature on capacity



### The effect of discharge depth on cycle life



### Cur ves of self-discharge



### Curves of open circuit voltage vs. capacity

