

OPZV2- 420

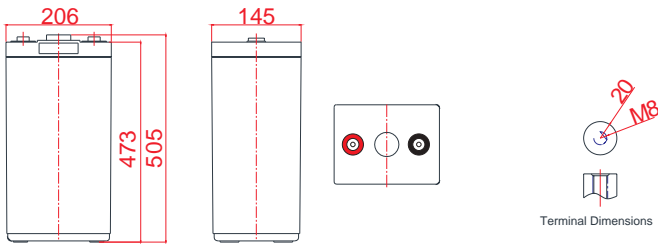


General Features

- > 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)×206(W) ×473(H) ×505(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	420Ah	
Design life	20 years	
Terminal	M8	
Approx. Weight	Approx 33.5kg (73.9lbs)	
Container Material	ABS	
Rated Capacity	420Ah	10Hour Rate (42.0A to 1.80V)
	315Ah	3Hour Rate (105A to 1.80V)
	218Ah	1Hour Rate (218A to 1.75V)
Internal resistance	Full charged at 25°C: 0.55 m	
Max. Discharge Current	2000A(5S)	
Operating Temperature	Discharge:	-40 ~60 (-40~ 140°F)
	Charge:	-20 ~50 (-4~ 122°F)
	Storage:	-20 ~50 (-4~ 122°F)
Charge current:	Max.85A Recom.42A	
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)

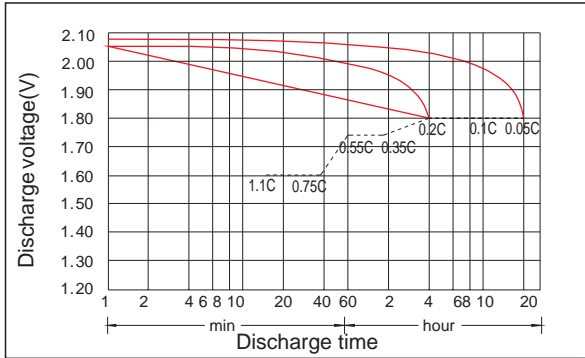
F. V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h
1.60V	441	347	252	158	113	90.0	76.7	67.4	54.4	44.5
1.65V	416	330	237	153	111	88.0	75.8	66.6	54.0	44.3
1.70V	393	315	233	149	109	88.0	74.8	65.5	53.3	44.1
1.75V	368	298	218	145	107	86.0	73.5	64.3	52.3	43.5
1.80V	342	279	208	141	105	84.0	71.8	62.6	51.0	42.2
1.85V	315	254	195	132	101	82.0	69.5	60.5	49.6	41.6

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

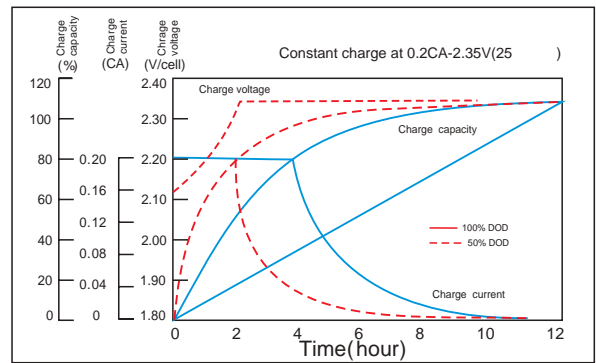
F. V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h
1.60V	760	609	460	294	214	171	146	128	104	85.3
1.65V	727	578	433	288	211	168	144	127	103	85.1
1.70V	687	554	426	281	208	167	143	125	103	84.8
1.75V	649	531	407	275	205	165	141	124	101	84.0
1.80V	613	510	391	269	202	161	138	121	98.5	81.7
1.85V	569	470	372	254	195	159	135	118	96.6	81.3

OPZV2- 42 0

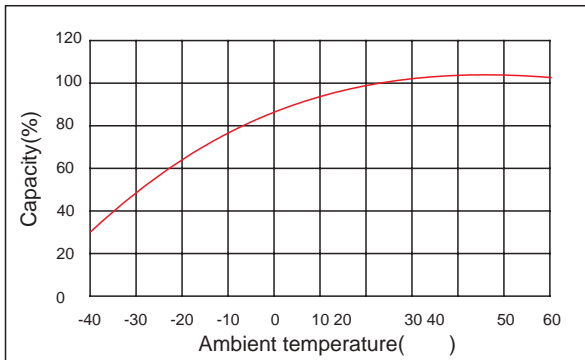
Discharge characteristic



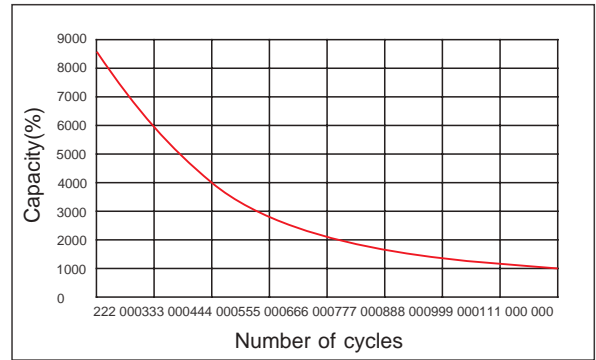
Charging characteristic



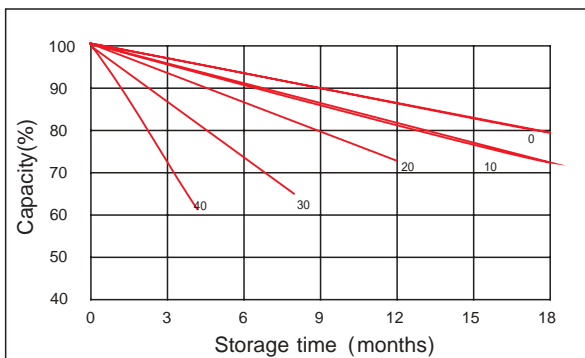
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

