

NPDC122300

Classic Range



Applications

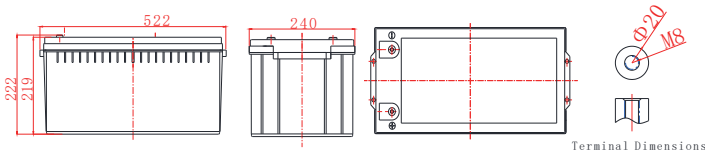
- > Solar / wind energy and other new energy storage
- > UPS/EPS
- > Power systems
- > Telecommunications system
- > Emergency lighting, Auto control system
- > Other general purpose

General Features

- > Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- > 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
- > Long life



Dimension: 522(L) × 240(W) × 219(H) × 222(TH) Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	230Ah
Design life	12 years
Terminal	M8
Approx. Weight	Approx 59.0kg (130lbs)
Container Material	ABS
Rated Capacity	230Ah 20Hour Rate (11.5A to 10.5V)
	161Ah 3Hour Rate (53.7A to 10.8V)
	131Ah 1Hour Rate (131A to 10.5V)
Internal resistance	Full charged at 25°C: 3.2 mΩ
Max. Discharge Current	2400A(5S)
Operating Temperature	Discharge: -40 ~ 60°C (-40 ~ 140°F)
	Charge: -20 ~ 50°C (-4 ~ 122°F)
	Storage: -20 ~ 50°C (-4 ~ 122°F)
Charge current:	Max. 50A ; Recom. 20A
Float Charge voltage (-3mV/°C) :	
Charge Method (25°C)	13.5-13.8V, recom. 13.5V (Full floating system)
	13.5-13.8V, recom. 13.62V (Cycle use system)
	Equalize charge: 13.8-14.1V, recom. 14.1V (-4mV/°C)
	Cycle charge: 14.4-15.0V, recom. 14.4V (-5mV/°C)
Self discharge	3% of capacity declined per month at 25°C

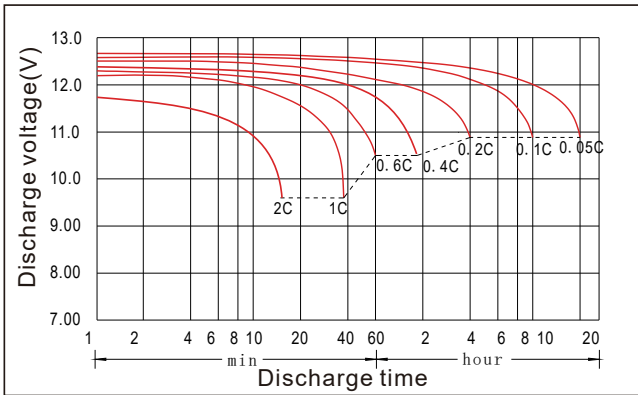
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	705	379	230	135	77.2	56.1	37.6	24.7	20.8	11.6
1.65V	683	367	226	134	76.8	55.5	37.2	24.5	20.6	11.6
1.70V	656	359	222	133	76.2	54.7	36.8	24.3	20.4	11.5
1.75V	603	348	221	131	75.1	54.1	36.5	24.1	20.2	11.5
1.80V	541	324	211	128	73.7	53.7	35.5	23.9	20.0	11.4
1.85V	482	289	192	118	70.0	50.6	33.7	22.9	19.4	11.2

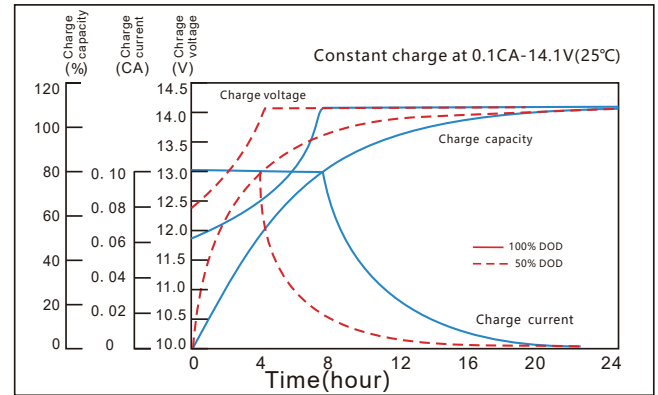
Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	1181	667	417	255	146	107	71.3	48.0	40.0	23.2
1.65V	1136	655	413	253	146	105	71.0	47.6	39.6	23.1
1.70V	1131	647	413	251	145	105	70.4	47.4	39.2	22.9
1.75V	1054	643	411	249	144	104	70.0	47.0	38.8	22.8
1.80V	968	608	401	247	144	104	69.2	46.6	38.4	22.7
1.85V	865	544	368	229	137	98.6	66.1	45.1	37.8	22.4

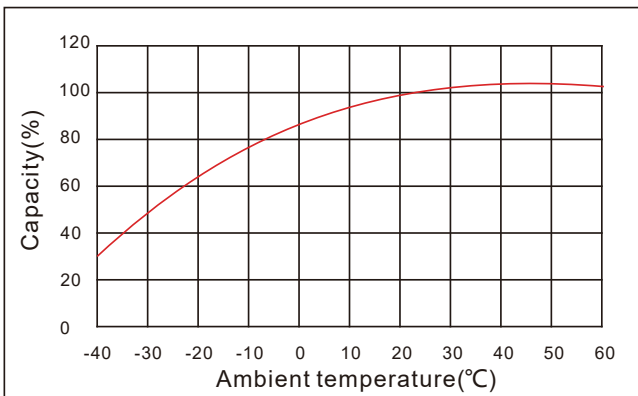
Discharge characteristic



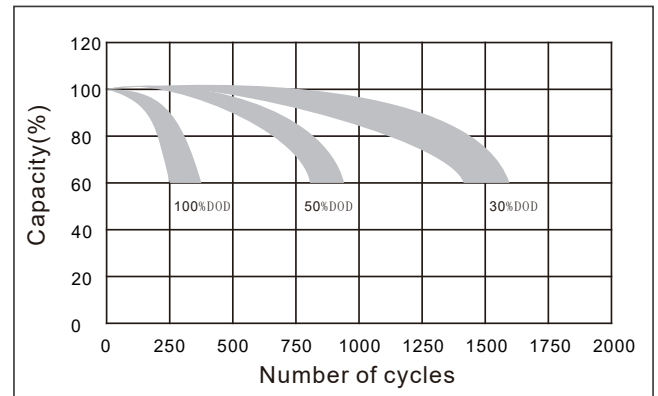
Charging characteristic



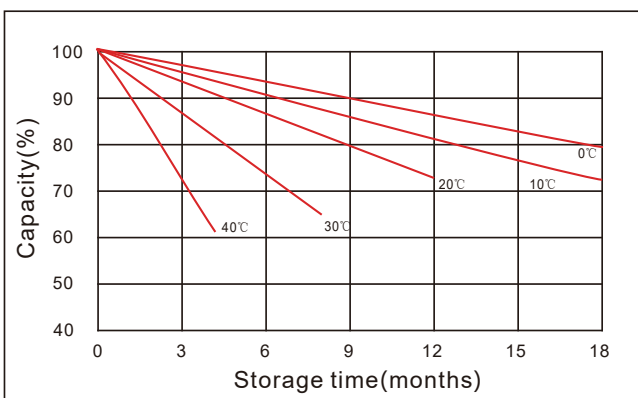
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

