

12V OPR240-12 Deep Cycle Rechargeable AGM / GEL Hybrid VRLA Solar Battery



Applications

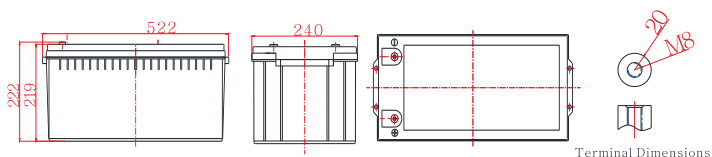
Telecommunications	Emergency Lighting
Process Control	Streetlights
Power Stations	Fire & Security Systems
Solar & Wind	Cell Towers
UPS	Hospitals
Railway Systems	Banks
Backup Power Systems	Computer Centres

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	200Ah
Terminal	M8
Approx. Weight	Approx 59.5kg (131.1lbs)
Container Material	ABS
Rated Capacity	200Ah 10Hour Rate (20.0A to 10.8V)
	158Ah 3Hour Rate (52.6A to 10.8V)
	128Ah 1Hour Rate (128A to 10.5V)
Internal resistance	Full charged at 25°C: 3.2 mΩ
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.50.0A ; Recom.20.0A
Charge Method (25 °C)	Float Charge: 13.5-13.8V, recom.13.8V(-18mV/ °C)
	Equalize charge: 13.8-14.1V, recom.14.1V(-24mV/ °C)
	Cycle charge: 14.4-15.0V, recom.14.7V(-30mV/ °C)
Self discharge	3% of capacity declined per month at 25°C

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

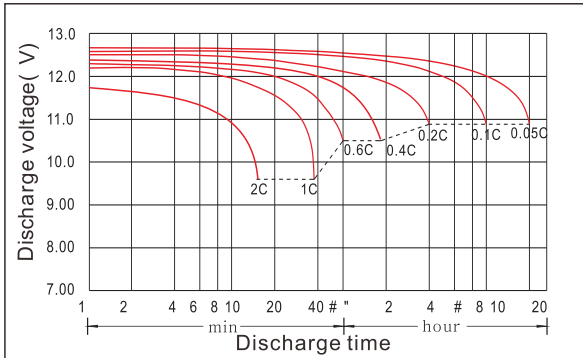
FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	367	223	132	75.7	54.9	36.9	24.2	20.7	10.9
1.65V	356	220	131	75.3	54.4	36.5	24.0	20.5	10.8
1.70V	348	216	130	74.7	53.6	36.1	23.8	20.3	10.7
1.75V	337	214	128	73.6	53.0	35.7	23.6	20.1	10.7
1.80V	314	205	125	72.2	52.6	34.8	23.4	20.0	10.6
1.85V	280	187	116	68.6	49.6	33.0	22.5	19.3	10.5

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

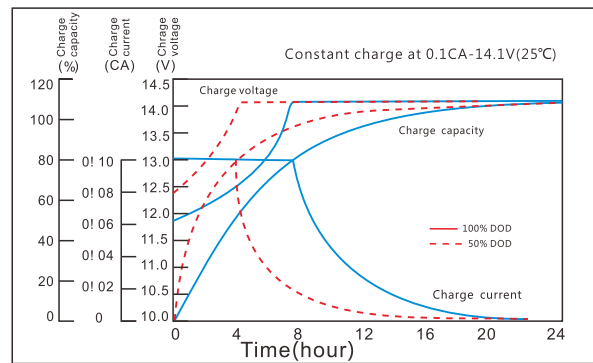
FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	647	404	250	143	104	69.9	47.1	39.8	21.5
1.65V	636	400	248	143	103	69.5	46.7	39.4	21.4
1.70V	628	400	246	142	103	69.0	46.5	39.0	21.3
1.75V	624	398	244	141	102	68.6	46.1	38.6	21.2
1.80V	590	389	242	141	102	67.8	45.7	38.2	21.1
1.85V	527	357	225	135	97	64.7	44.2	37.6	20.9

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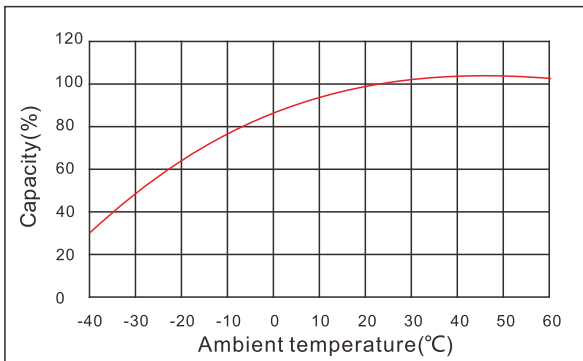
Discharge characteristic



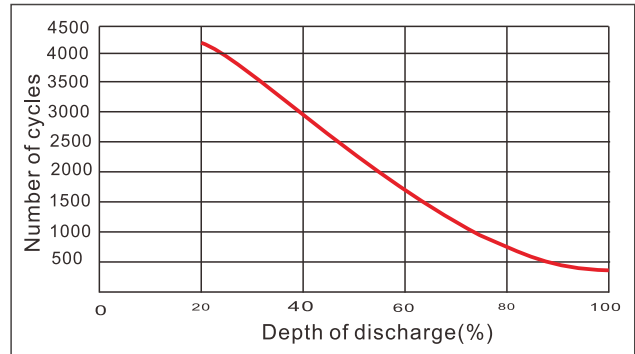
Charging characteristic



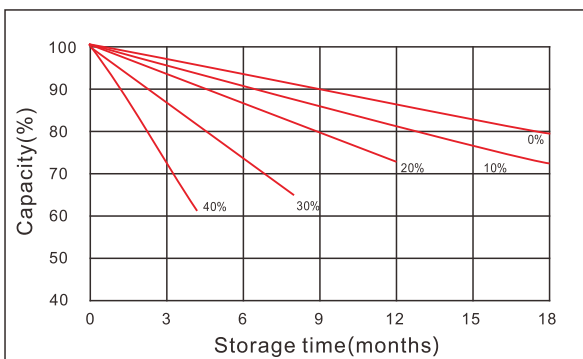
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

