

12V OPR180-12 Deep Cycle Rechargeable AGM / GEL Hybrid VRLA Solar Battery



Applications

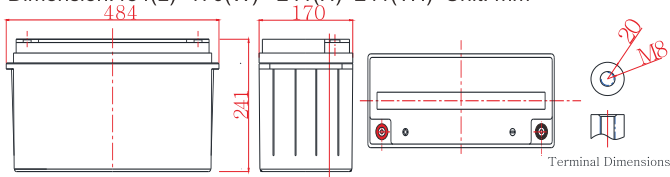
Telecommunications	Emergency Lighting
Process Control	Streetlights
Power Stations	Fire & Security Systems
Solar & Wind	Cell Towers
UPS	Hospitals
Railway Systems	Banks
Backup Power Systems	Computer Centres

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: 484(L) × 170(W) × 241(H) × 241(TH) Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	150Ah
Terminal	M8
Approx. Weight	Approx 45.0kg (99.3lbs)
Container Material	ABS
Rated Capacity	150Ah → 10Hour Rate (15.0A to 10.8V)
	119Ah → 3Hour Rate (39.5A to 10.8V)
	96.2Ah → 1Hour Rate (96.2A to 10.5V)
Internal resistance	Full charged at 25°C: 3.6 mΩ
Max. Discharge Current	1800A(5S)
Operating Temperature	Discharge: -40 ~ -60' (-40 ~ 140°F)
	Charge: -20 ~ -50' (-4 ~ 122°F)
	Storage: -20 ~ -50' (-4 ~ 122°F)
Charge current:	Max. 37.5A ; Recom. 15.0A
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	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

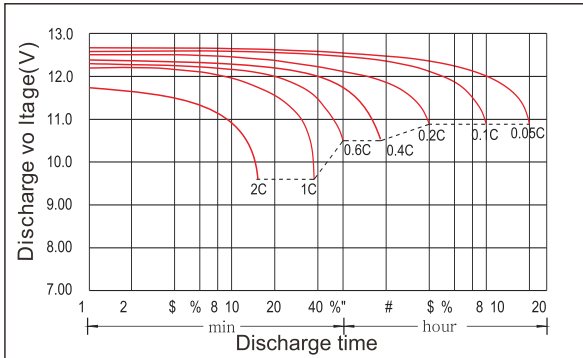
Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

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

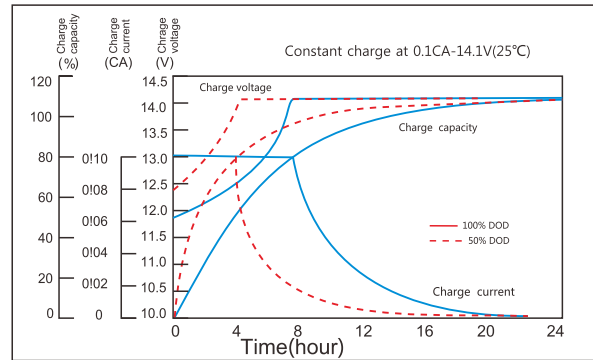
Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

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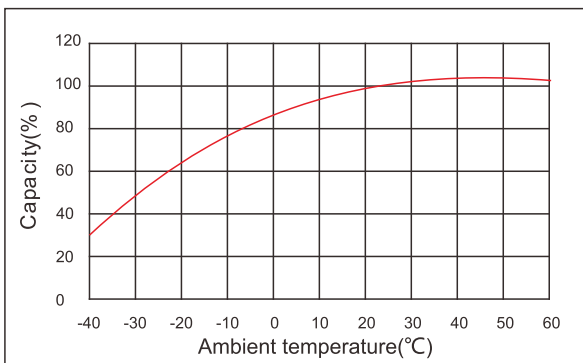
Discharge characteristic



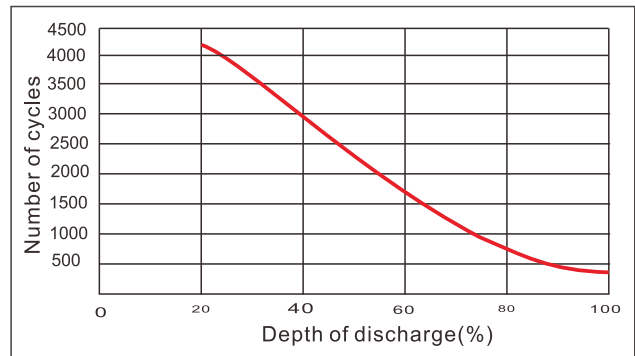
Charging characteristic



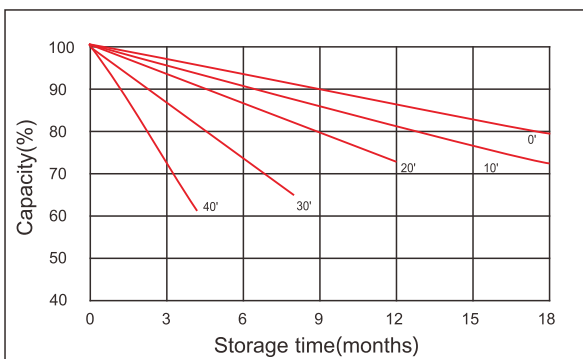
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

