

SPG SERIES - GEL DEEP CYCLE BATTERY

SPG12-200 (12V 200Ah)

Features

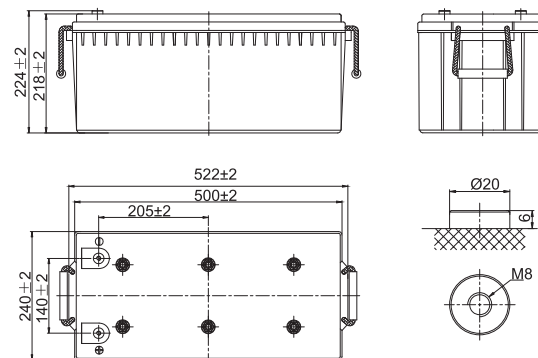
- ✓ 10 years design life (25°C)
- ✓ Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- ✓ PbCaSn alloy for plate grids: less gassing, less self-discharging
- ✓ High quality AGM separator: extend cycle life and prevent micro short circuit
- ✓ High purity raw material: ensure low self discharge rate

Applications

- ✓ All purpose
- ✓ Uninterruptable Power Supply (UPS)
- ✓ Electric Power System (EPS)
- ✓ Emergency backup power supply
- ✓ Alarm and security system
- ✓ Communication power supply
- ✓ DC power supply
- ✓ Auto control system
- ✓ Solar Power Systems
- ✓ Wheel chair and Mobility Scooters



LAYOUT



Standards

- ✓ Compliance with IEC 60896 standards, EU Battery Directive
- ✓ UL, CE Certified
- ✓ Manufactured at Supreme Power Systems, ISO Certified Production facilities® IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

SPECIFICATIONS

Rated Voltage	12V	
Nominal Capacity	200Ah	(C ₆₄ , 1.80V/cell)
Dimensions	Length	522±2mm (20.6 inches)
	Width	240±2mm (9.45 inches)
	Container height	218±2mm (8.58 inches)
	Total height	224±2mm (8.81 inches)
Approx. weight	62.3kg (137.4 lbs)	
Terminal	M8	
	ABS	
Rated capacity (25°C)	200.0 Ah	C20(10.0A,1.80V/cell)
	190.0 Ah	C10(19.0A,1.80V/cell)
	165.5 Ah	C5(33.1A,1.75V/cell)
	148.2 Ah	C3(49.4A,1.75V/cell)
	120.3 Ah	C1(120.3A,1.60V/cell)
Max. discharge current	2000A (5s)	
Internal resistance (25°C)	Approx 4.6mΩ	
Operating temp. range	Discharge	-20~55°C (-4~131°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-15~50°C (5~122°F)
Nominal operating temp. range	25±3°C (77±5°F)	
Standby Use	Initial Charging Current less than 50A. Voltage 2.23V~2.27V at 25°C(77°F)Temp. Coefficient -3mV/°C	
Equalization Use	Initial Charging Current less than 50A.Voltage 2.30V~2.37V at 25°C(77°F)Temp. Coefficient -4mV/°C	
Cycle Use	Initial Charging Current less than 50A.Voltage 2.40V~2.50V at 25°C(77°F)Temp. Coefficient -5mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self discharge	SP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

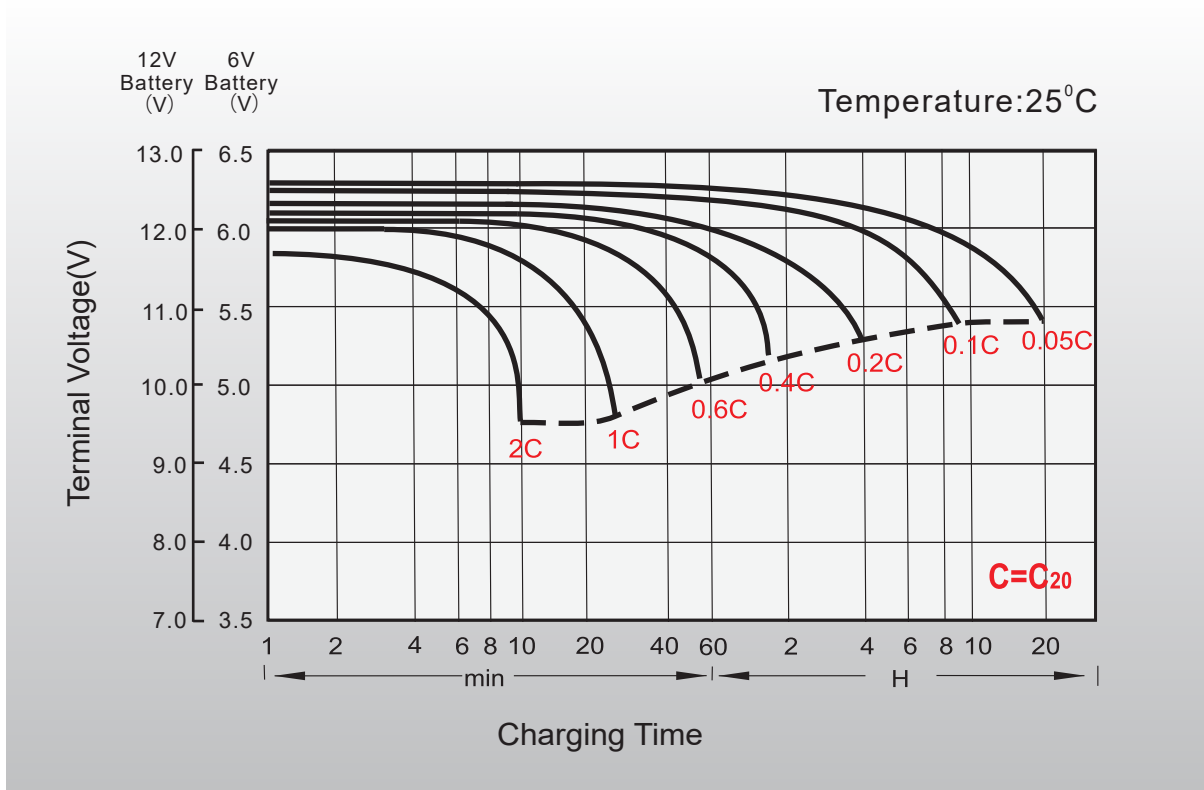
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	2h
1.85V/cell	250.0	216.8	170.5	154.2	112.8	89.3	69.2	55.2	43.8	35.6	31.0	27.1	22.0	18.6	9.62
1.80V/cell	283.8	245.7	192.7	167.9	119.5	98.8	73.5	60.8	48.1	38.7	32.6	28.7	22.9	19.0	10.0
1.75V/cell	292.7	255.6	201.0	166.7	121.4	108.7	78.8	63.9	49.4	39.3	33.1	29.2	23.1	19.4	10.3
1.70V/cell	307.8	266.0	208.1	171.3	123.8	110.8	80.4	65.2	50.1	39.9	33.6	29.6	23.3	19.6	10.4
1.67V/cell	338.6	290.7	226.7	177.3	113.1	128.1	116.5	84.0	67.8	51.6	40.6	34.6	30.1	23.7	19.8
1.60V/cell	350.2	299.7	232.5	179.9	130.0	120.3	86.3	69.3	52.3	41.3	35.3	30.6	23.9	20.0	10.8

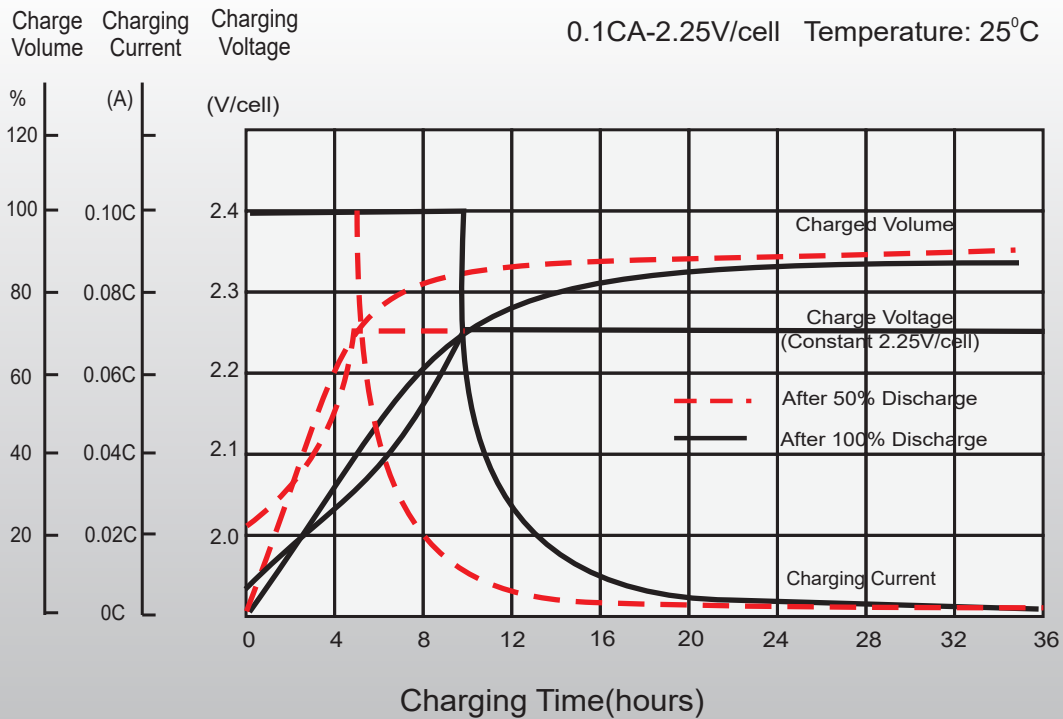
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	2h
1.85V/cell	470.4	410.5	324.3	294.7	216.8	173.6	134.8	107.9	86.0	70.04	61.0	53.5	43.5	36.9	19.2
1.80V/cell	526.2	459.2	362.7	318.3	228.2	142.4	142.4	118.2	94.0	75.8	64.1	56.4	45.2	37.5	19.9
1.75V/cell	540.3	475.3	376.6	315.5	231.8	208.9	152.3	124.1	96.1	76.7	64.9	57.4	45.5	38.3	20.5
1.70V/cell	561.6	490.0	387.1	322.3	235.1	235.1	154.9	126.2	97.3	77.8	65.8	58.1	45.8	38.6	20.6
1.67V/cell	600.0	523.6	413.6	328.4	240.3	220.7	160.2	130.0	99.6	78.8	67.3	58.7	46.5	38.9	21.0
1.60V/cell	608.4	530.9	419.4	329.8	241.5	225.7	163.1	131.8	100.3	79.7	68.5	59.4	46.7	39.2	21.3

Discharge Characteristics

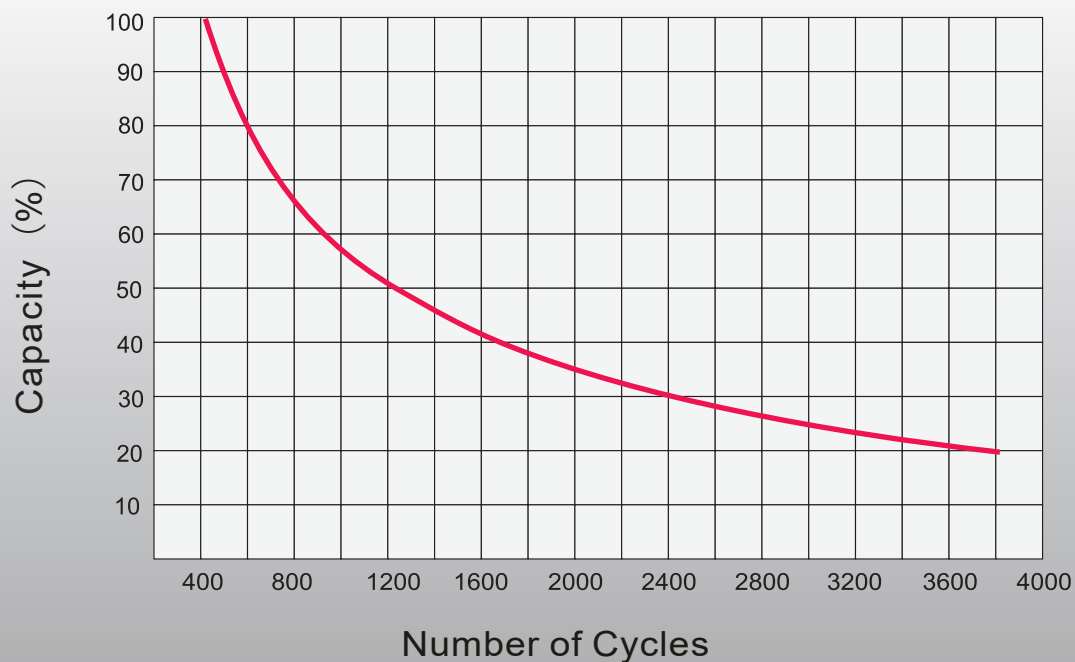


Float Charging Characteristics



Cycle Life in Relation to Depth of Discharge

Acc.to IEC 896-2 (25°C / 77°F)



Effect of Temperature on Long Term Float Life

