

SPG 12V-240Ah

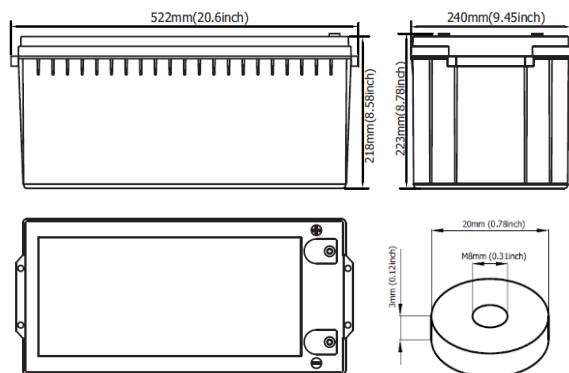
VRLA GEL Battery



APPLICATIONS

- Solar & Wind power systems
- Power plants
- Uninterruptible Power Supply (UPS)
- Telecommunication systems
- Electric wheelchairs
- Golf carts
- Remote monitoring and controlling
- Water pumping systems

DIMENSIONS



SPECIFICATIONS

Nominal Voltage		12 V
Number of cells		6
Design Floating Life (20°C)		12 years
Dimensions	Length	522 mm
	Width	240 mm
	Height	218 mm
	Total Height	221 mm
Weight		60.5 kg
Nominal Capacity (25°C)	120 hours rate (1.85)	239 Ah
	10 hours rate (1.80)	202 Ah
	5 hours rate (1.75)	168 Ah
	1 hours rate (1.60)	121 Ah
Internal Resistance (fully charged, 25°C)		3.3 mOhm
Self Discharge		approx. 3% per month at 20°C
Nominal Operating Temperature		25°C
Operating Temperature range	Discharge	-15°C to 65°C
	Charge	-10°C to 60°C
	Storage	-20°C to 60°C
Float Charging Voltage		2.27 to 2.30 V/cell at 25°C
Temperature compensation		-18mV/°C
Cyclic Charging Voltage		2.40 to 2.47 V/cell at 25°C
Temperature compensation		-30mV/°C
Maximum charging current		50 A
Maximum discharge current (25°C)		2000 A (5 sec.)
Short Circuit Current		3000 A

PERFORMANCE DATA

Discharge Constant Current at 25°C (Amperes)

End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	120h
1.60 V	402	307	194	155	121	72.9	49.5	39.2	34.3	24.4	20.7	10.6	----
1.65 V	391	300	190	152	119	72.3	49.2	38.9	34.1	24.1	20.6	10.6	----
1.70 V	375	289	184	147	116	71.7	48.8	38.7	33.7	24.0	20.5	10.5	----
1.75 V	359	279	180	144	114	70.6	48.5	38.4	33.5	23.8	20.3	10.5	----
1.80 V	338	264	173	139	110	68.9	47.1	37.3	32.5	23.1	20.2	10.4	2.02
1.85 V	333	260	170	137	109	67.9	46.4	36.7	32.1	22.8	19.9	10.3	1.99

Discharge Constant Power at 25°C (Watts/Cell)

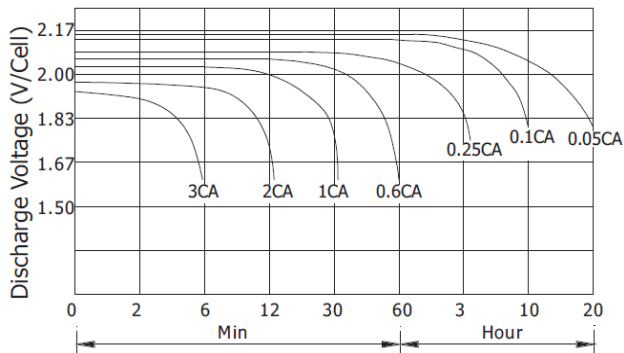
End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	120h
1.60 V	758	561	362	297	230	140	96.9	76.7	68.4	48.8	41.3	22.0	----
1.65 V	740	548	355	293	227	140	96.2	76.2	68.0	48.0	41.0	21.9	----
1.70 V	707	529	345	284	221	138	95.7	75.8	67.8	47.7	40.7	21.8	----
1.75 V	679	511	337	279	217	137	95.0	75.3	67.2	47.1	40.4	21.7	----
1.80 V	640	483	324	269	210	133	92.3	72.9	65.4	46.0	40.1	21.0	4.01
1.85 V	630	476	319	265	207	131	90.9	71.8	64.5	45.3	39.5	20.7	3.95

Note: The above characteristics data can be obtained within three charge/discharge cycles.

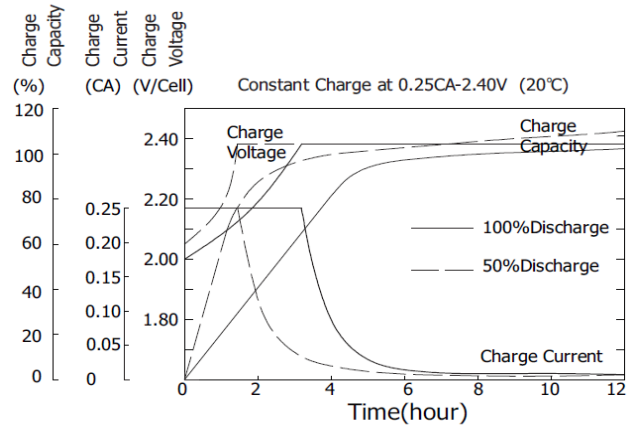
SPG 12V-240Ah

Solar VRLA GEL Battery

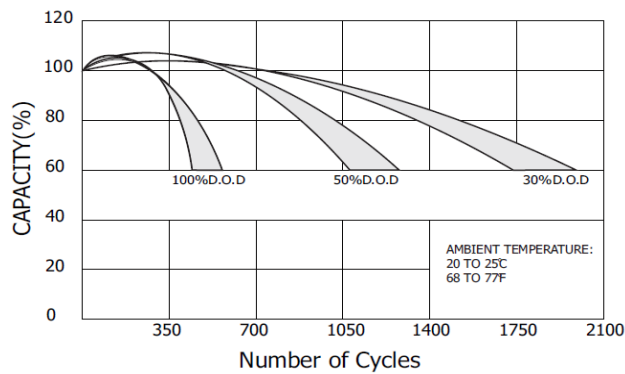
Discharge Characteristics (20°C)



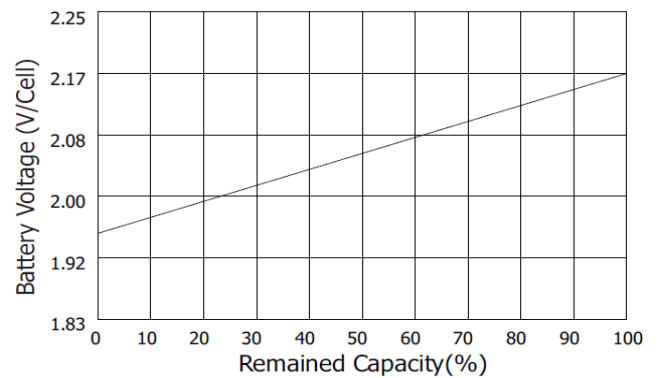
Charging Characteristics (20°C)



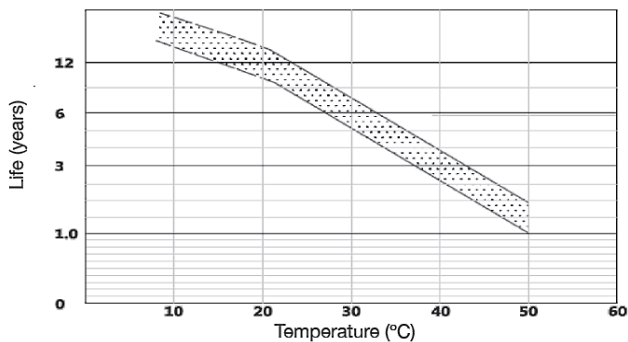
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (20°C)



Temperature Effects on Float Life



Self Discharge Characteristics

