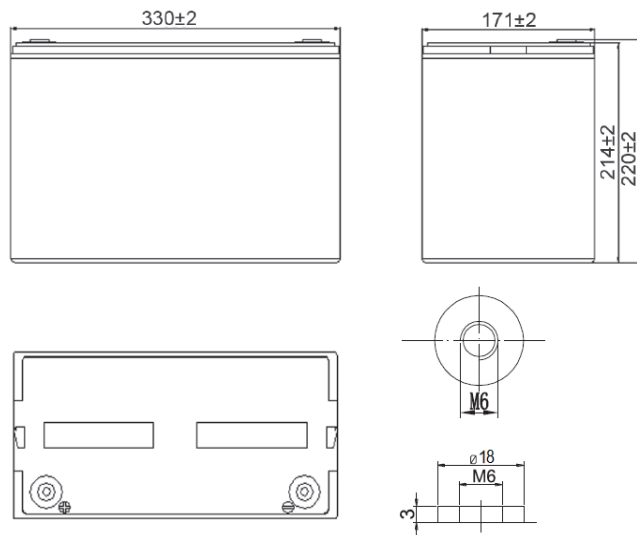


SPG 12V-100Ah

VRLA GEL Battery

FEATURES & BENEFITS

- Non-spillable maintenance free product
- High Quality and High Reliability
- Wide range of operating temperature
- Fast and easy installation
- Low self discharge
- Compact design with high energy density
- IEC 60896-21 & 22, IEC 62485-2 compliant
- Non-hazardous cargo for sea/rail/road transportation
- Fully recyclable product



SPECIFICATIONS

Nominal Voltage		12 V
Number of cells		6
Design Floating Life (20°C)		12 years
Dimensions	Length	330 mm
	Width	171 mm
	Height	214 mm
	Total Height	220 mm
Weight		30.5 kg
Nominal Capacity (25°C)	120 hours rate (1.85)	121 Ah
	10 hours rate (1.80)	103 Ah
	5 hours rate (1.75)	85.5 Ah
	1 hours rate (1.60)	61.8 Ah
Internal Resistance (fully charged, 25°C)		5 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		25 A
Maximum discharge current (25°C)		1000 A (5 sec.)
Short Circuit Current		1500 A

PERFORMANCE DATA

Discharge Constant Current at 25°C (Amperes)

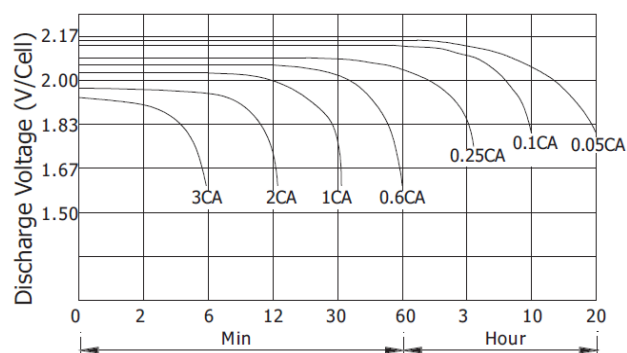
End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	120h
1.60 V	170	157	98.9	78.8	61.8	37.1	25.2	20.0	17.4	12.5	10.7	5.48	----
1.65 V	164	152	96.9	77.7	60.9	36.9	25.0	19.9	17.3	12.4	10.5	5.45	----
1.70 V	157	147	93.9	74.8	59.3	36.5	24.9	19.7	17.2	12.3	10.5	5.41	----
1.75 V	149	140	91.7	73.1	57.2	35.7	24.7	19.6	17.1	12.2	10.4	5.36	----
1.80 V	141	133	88.3	71.0	56.3	35.1	24.1	19.0	16.6	11.7	10.3	5.30	1.03
1.85 V	139	131	87.0	69.9	55.5	34.6	23.8	18.7	16.4	11.5	10.1	5.22	1.01

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

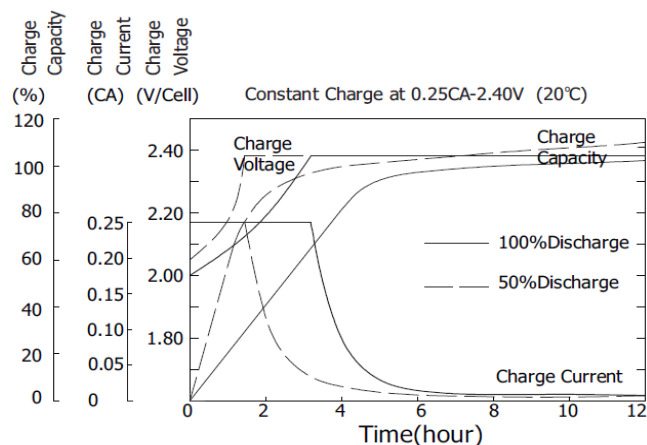
End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	120h
1.60 V	304	287	185	152	117	71.4	49.4	39.1	34.3	24.5	20.9	10.9	----
1.65 V	295	280	181	149	115	71.3	49.1	39.0	34.2	24.4	20.8	10.8	----
1.70 V	283	269	176	145	112	70.7	48.8	38.6	34.0	24.2	20.8	10.8	----
1.75 V	271	260	171	142	110	69.7	48.4	38.3	33.6	24.0	20.6	10.7	----
1.80 V	256	242	165	136	107	67.7	47.0	37.2	32.6	23.7	20.4	10.7	2.04
1.85 V	252	238	163	134	105	66.7	46.3	36.7	32.1	23.3	20.1	10.5	2.01

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

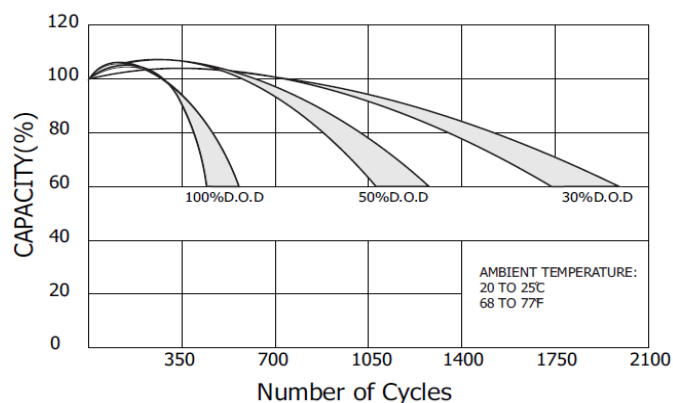
Discharge Characteristics (20°C)



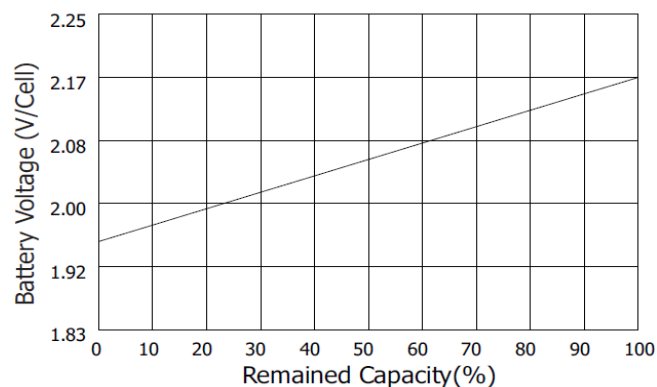
Charging Characteristics (20°C)



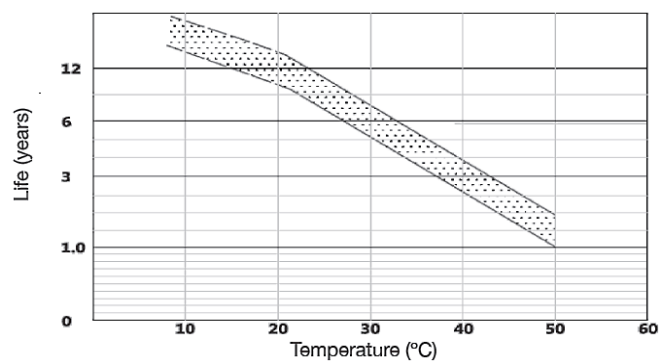
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (20°C)



Temperature Effects on Float Life



Self Discharge Characteristics

