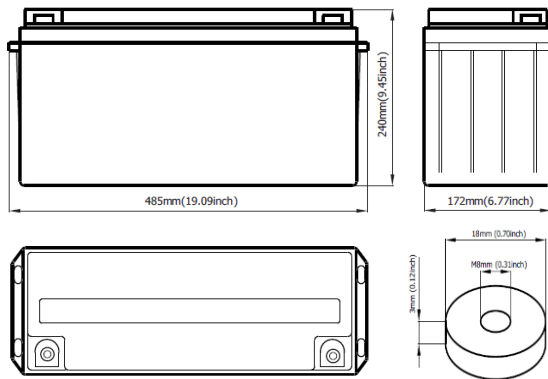




APPLICATIONS

- 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	485 mm
	Width	172 mm
	Height	240 mm
	Total Height	240 mm
Weight		43 kg
Nominal Capacity (25°C)	120 hours rate (1.85)	180 Ah
	10 hours rate (1.80)	151 Ah
	5 hours rate (1.75)	126 Ah
	1 hours rate (1.60)	90.9 Ah
Internal Resistance (fully charged, 25°C)		3.9 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		37.5 A
Maximum discharge current (25°C)		1500 A (5 sec.)
Short Circuit Current		2250 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	302	230	146	116	90.9	54.6	37.1	29.4	25.7	18.3	15.5	7.94	----
1.65 V	293	225	142	114	89.6	54.3	36.9	29.2	25.5	18.1	15.4	7.93	----
1.70 V	280	216	138	110	87.3	53.9	36.7	29.0	25.4	18.0	15.4	7.91	----
1.75 V	270	209	134	108	85.6	53.1	36.4	28.8	25.2	17.9	15.2	7.86	----
1.80 V	254	198	130	104	83.0	51.6	35.3	27.9	24.5	17.4	15.1	7.81	1.52
1.85 V	250	195	128	103	81.7	50.9	34.7	27.5	24.1	17.1	14.9	7.69	1.50

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

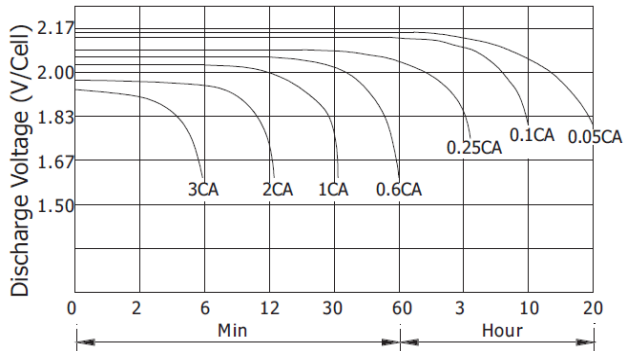
End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	120h
1.60 V	568	421	272	223	173	105	72.7	57.5	50.6	36.7	31.5	16.3	----
1.65 V	554	411	266	219	170	105	72.2	57.2	50.2	36.3	31.3	16.1	----
1.70 V	529	396	259	212	166	104	71.8	56.9	49.9	36.1	31.1	15.9	----
1.75 V	509	383	252	209	163	102	71.3	56.5	49.5	35.5	30.6	15.7	----
1.80 V	479	362	243	201	158	99.7	69.2	54.7	48.5	34.6	30.2	15.6	3.02
1.85 V	472	357	239	198	155	98.2	68.2	53.9	47.8	34.0	29.7	15.4	2.97

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

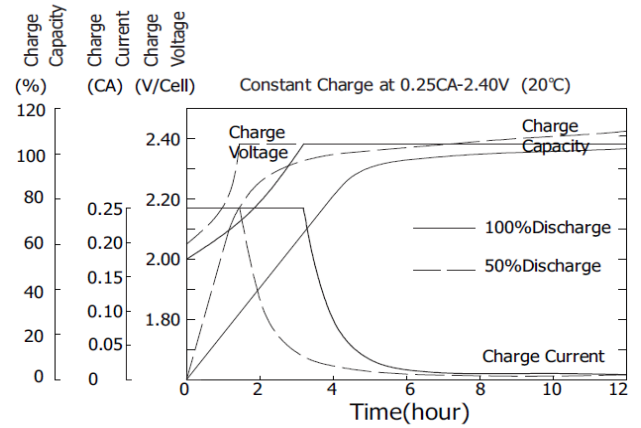
SPG 12V-180Ah

Solar VRLA GEL Battery

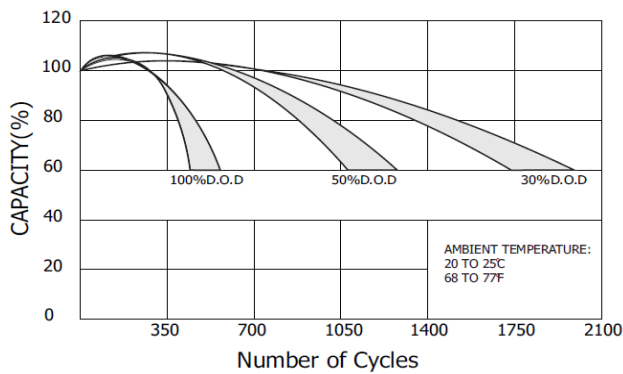
Discharge Characteristics (20°C)



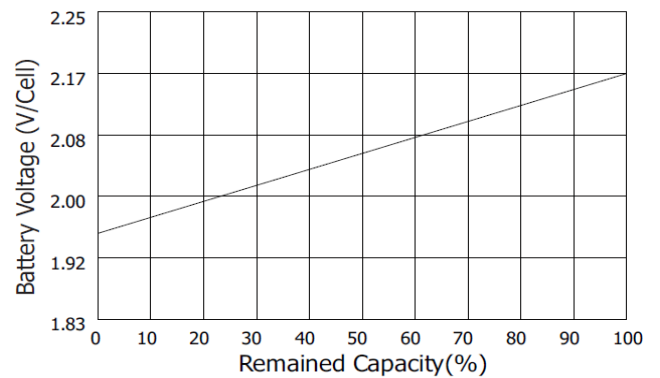
Charging Characteristics (20°C)



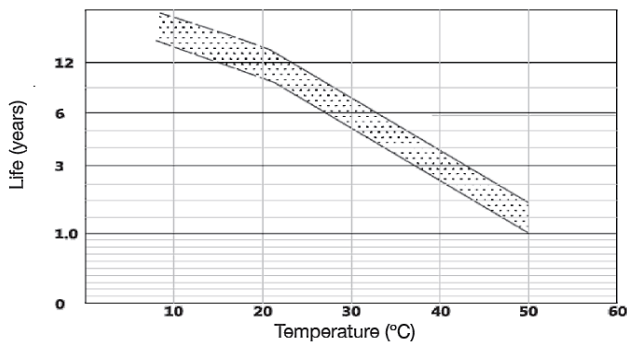
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (20°C)



Temperature Effects on Float Life



Self Discharge Characteristics

