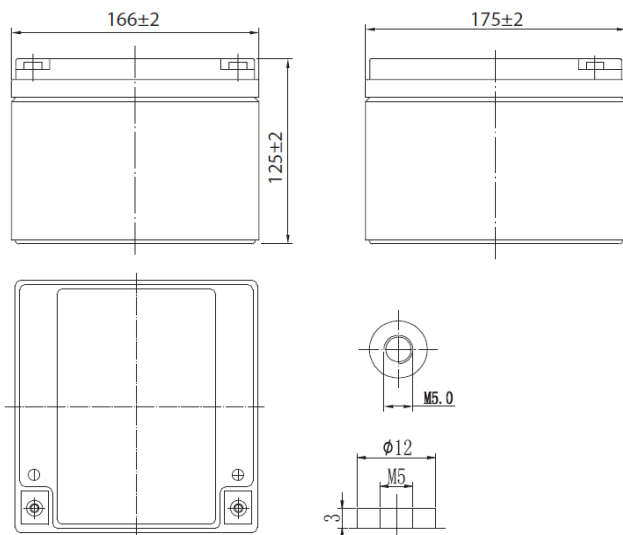


**APPLICATIONS**

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



**SPECIFICATIONS**

Nominal Voltage	12 V	
Number of cells	6	
Cycle Life	Approx. 900 cycles at 50% DoD	
Design Floating Life (20°C)	12 years	
Dimensions	Length	175 mm
	Width	166 mm
	Height	125 mm
	Total Height	125 mm
Weight	8.05 kg	
Nominal Capacity (25°C)	120 hours rate (1.85)	31.2 Ah
	10 hours rate (1.80)	23.4 Ah
	5 hours rate (1.75)	21.0 Ah
	1 hours rate (1.60)	15.8 Ah
Internal Resistance (fully charged, 25°C)	12.5 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	-20mV/°C	
Cyclic Charging Voltage	2.40 to 2.47 V/cell at 25°C	
Temperature compensation	-30mV/°C	
Maximum charging current	7.8 A	
Maximum discharge current (25°C)	260 A (5 sec.)	
Short Circuit Current	390 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	55.4	44.6	26.3	18.2	15.8	9.16	6.55	5.27	4.28	2.87	2.42	1.34	----
1.65 V	52.6	43.5	25.8	17.9	15.6	9.12	6.53	5.25	4.26	2.85	2.41	1.33	----
1.70 V	50.6	41.9	24.9	17.3	15.2	9.05	6.50	5.22	4.23	2.83	2.40	1.32	----
1.75 V	47.9	40.5	24.3	17.0	15.0	8.97	6.48	5.19	4.20	2.81	2.39	1.31	----
1.80 V	45.2	38.4	23.4	16.4	14.8	8.76	6.34	5.13	4.11	2.74	2.34	1.30	0,26
1.85 V	44.5	37.8	23.0	16.1	14.5	8.63	6.24	5.05	4.05	2.69	2.30	1.28	0,26

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

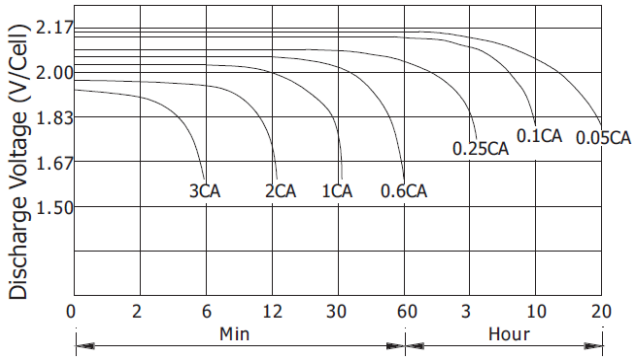
End Voltage (V/cell)	10min	15min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h	120h
1.60 V	94.6	86.0	50.9	35.8	30.9	18.0	13.0	10.5	8.62	5.80	4.90	2.69	----
1.65 V	91.6	84.0	49.8	35.1	30.4	17.7	12.8	10.4	8.57	5.76	4.88	2.69	----
1.70 V	88.0	80.9	48.3	34.1	29.5	17.5	12.7	10.3	8.50	5.71	4.86	2.67	----
1.75 V	84.2	78.2	47.1	33.3	29.0	17.4	12.6	10.3	8.45	5.68	4.83	2.65	----
1.80 V	79.4	73.9	45.4	31.7	28.2	16.9	12.2	9.95	8.19	5.51	4.73	2.60	0,52
1.85 V	78.2	72.8	44.7	31.3	27.8	16.7	12.0	9.80	8.07	5.43	4.66	2.56	0,51

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

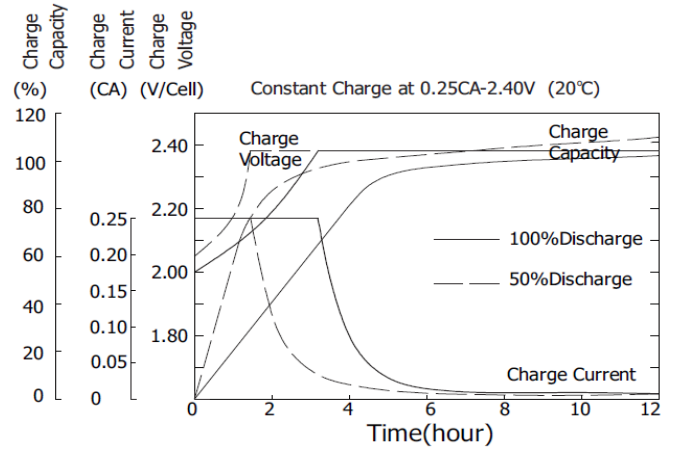
# SPG 12V-35Ah S

VRLA GEL Battery for Solar & Stand-by Applications

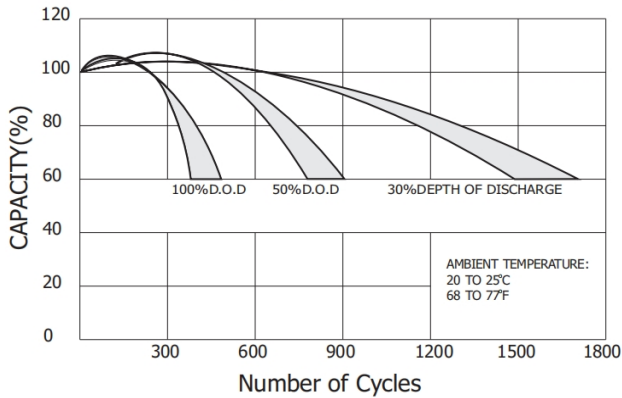
## Discharge Characteristics (20°C)



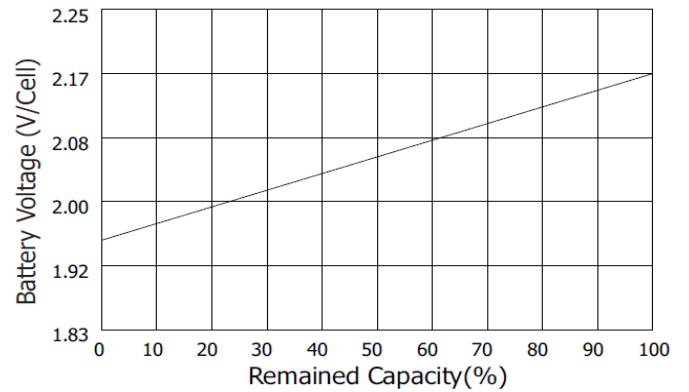
## Charging Characteristics (20°C)



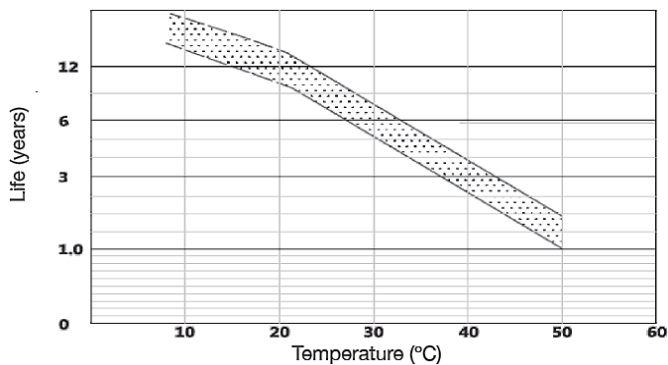
## Cycle Service Life in Relation to Depth of Discharge



## Relationship Between OCV and Residual Capacity (20°C)



## Temperature Effects on Float Life



## Self Discharge Characteristics

