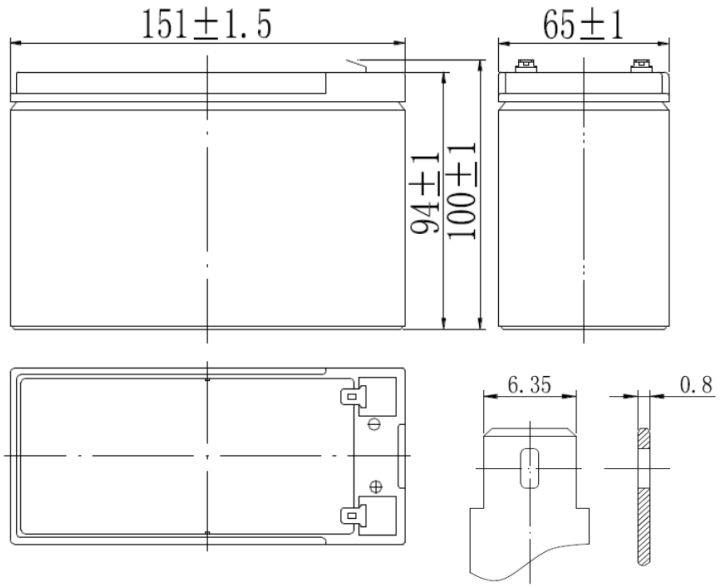
SUNLIGHT
Reliable Battery Solutions

SUNLIGHT SPHR 12V-48W

AGM VRLA High Rate Battery

Applications

- IT systems
- Data centers
- Power generation plants and substations
- Telecommunication electrical equipments
- Switchboards
- Robots, control equipment and other factory automation equipment
- Broadcasting systems
- Various telemeter equipments
- Signaling



Specifications

Nominal Voltage		12 V
Number of cells		6
Design Floating Life (20℃)		10 years
Dimensions	Length	151 mm
	Width	65 mm
	Height	94 mm
	Total Height	100 mm
Weight		2.52 kg
Watts (10 min @ 1.60 Vpc, 20ºC)		48 W/Cell
Capacity (10 hrs @ 1.80 Vpc, 20ºC)		8.4 Ah
Short Circuit Current		680 A
Internal Resistance (fully charged, 25℃)		18 mOhm
Self Discharge		approx. 3% per month at 20℃
Nominal Operating Temperature		20℃
Operating Temperature range	Discharge	-15℃ to 50℃
	Charge	-10℃ to 50℃
	Storage	-20℃ to 50℃
Float Charging Voltage		2.27 to 2.30 V/cell at 20℃ Temperature compensation -18mV/℃
Maximum charging current		2.7 A
Maximum discharge current (20ºC)		135 A (5 sec.)

Performance Data

Discharge Constant Current at 20℃ (Amperes)

End Voltage (V/cell)	5min	10min	15min	20min	30min	45min	1h	3h	5h
1.60 V	39.1	23.9	18.9	14.7	10.1	7.20	6.03	2.35	1.61
1.65 V	37.8	23.2	18.3	14.3	9.94	7.05	5.94	2.34	1.60
1.67 V	37.3	22.8	18.1	14.1	9.82	6.96	5.88	2.33	1.59
1.70 V	36.4	22.2	17.7	13.8	9.63	6.84	5.79	2.32	1.59
1.75 V	34.8	21.3	17.1	13.2	9.40	6.67	5.67	2.31	1.58
1.80 V	32.8	20.1	16.2	12.6	9.06	6.42	5.50	2.24	1.53

Discharge Constant Power at 20℃ (Watts/Cell)

End Voltage (V/cell)	5min	10min	15min	20min	30min	45min	1h	3h	5h
1.60 V	74.5	48.0	37.1	28.9	20.0	14.1	11.9	4.71	3.21
1.65 V	73.0	47.5	36.3	28.1	19.6	13.9	11.6	4.68	3.19
1.67 V	72.1	47.2	35.6	27.7	19.3	13.7	11.5	4.67	3.18
1.70 V	70.7	46.1	34.9	27.1	19.0	13.4	11.4	4.65	3.17
1.75 V	68.7	44.5	33.7	26.2	18.5	13.1	11.2	4.62	3.15
1.80 V	66.5	42.9	32.0	24.8	17.9	12.7	10.8	4.48	3.06

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

SYSTEMS SUNLIGHT S.A.

Headquarters 2 Ermou & Nikis Str., Syntagma Square, 105 63 Athens, Attica, Greece **T** +30 210 6245400 **F** +30 210 6245409
European Manufacturing Plant Neo Olvio, 672 00 Xanthi, Greece **T** +30 25410 48100 **F** +30 25410 95446
Global Service Department 366 Tatoiou Str., 136 73 Acharnes, Attica, Greece **T** +30 210 6245600 **F** +30 210 6245619