

POWER SOLAR SERIES

POWER 
Power for a World of Applications

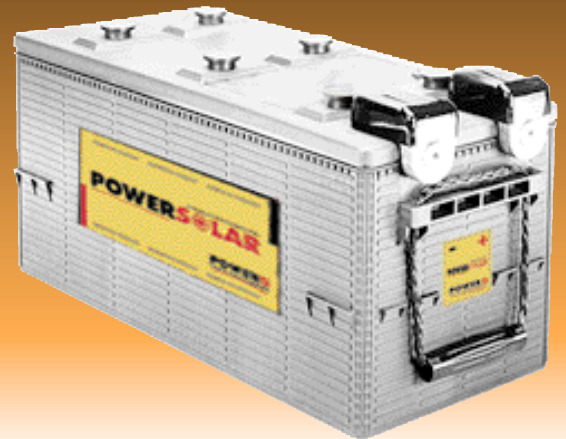
PSG-1 2255FT

**VALVE REGULATED LEAD ACID BATTERY
(V.R.L.A.)**

**ADVANCED GEL TECHNOLOGY
(AGM + GEL)**

SUPERIOR DISCHARGE PROFILE

The Power Solar Advanced Gel batteries are designed and manufactured to handle every aspect of the demanding solar industry. The PSG series is built to withstand the wide range of environments, storage, extreme operating conditions and charge/discharge cycles that Solar applications require.



SPECIFICATIONS

Cells per unit	6
Nominal voltage	12
Terminal Type	Front Access 5/16" Copper Insert
Capacity @ 77°F (25°C) to 1.75 v.p.c.	225 AH (20 Hours) 255 AH (100 Hours)
kWh to 1.75 v.p.c.	2.616 (20 hrs) 3.106 (100 hrs)
Short circuit current	9700 amps
Max discharge rate (1min rate)	854 amps
Impedance @ 77°F 25°C	1.42 milliohms
Electrolyte (S.G.)	1.300
CA (MCA) @ 32°F	2940
Ideal operating temperature range	68°F (20°C) to 77°F (25°C)
Extended operating temperature range	Discharge: -40°F to +140°F Charge: -60°F to +160°F
Float Voltage	2.25 to 2.3 Volts Per Cell
Cycle Service Voltage	2.33 to 2.36 Volts Per Cell
Max charging rate	Cycle - 45 amps Float - 37 amps
Discharge Rate to 1.75 Volts Per Cell	3 hours - 60 5 hours - 37 10 hours - 20.8
Weight lbs	178
Length x Width x Height case (Height to the top of the terminals)	21" x 8.5" x 8.88" (10.0")

FEATURES

- Advanced Gel Technology, provides deep cycle capability and better recharge profile throughout the life of the battery.
- Gas recombination greater than 99%.
- Sealed Non-spillable construction. Needs no water additions and will not allow electrolyte spills.
- Shock absorbent polypropylene plastic. Resistant to extreme temperatures and vibration.
- Operates at a low internal pressure.
- Thermally welded case to cover bond, eliminates the risk of acid and electrical leaks.
- Oversized internal components insures minimal voltage drop and more power availability.
- Each cell has a low pressure safety release venting system to prevent explosions, recognized per U.L. 924.
- Industrial grade battery plates.
- Puncture proof separator.
- Measured high vacuum acid fill, reduces electrical variability between cells.
- Can be used in any position, except upside down.
- Lifting handle.
- 100% recyclable materials.



Power Battery Company, Inc.
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PSG-12255FT

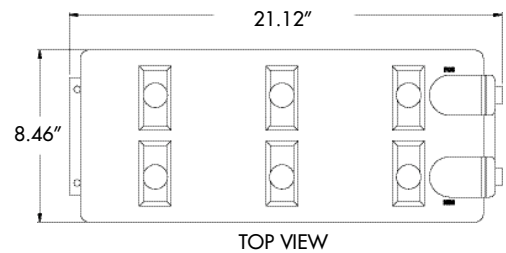
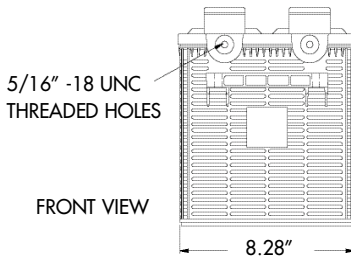
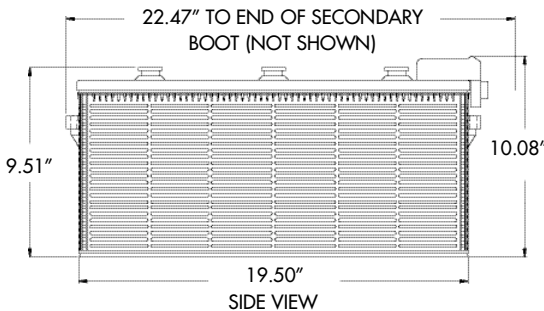
POWER BATTERY offers an extensive line of pre-wired and fused battery cabinets that are UL and CUL approved. Custom DC voltages complete with breakers and chargers are also available.



BATTERY CABINET SYSTEMS (PRE-WIRED WITH PSG-12255FT BATTERIES)					
Cabinet model	No. of batteries	inches / millimeters			Weight lbs / kg
		W	D	H	
CZ3	12	42.0 / 1067	31.5 / 800	50.3 / 1278	2244 / 1018
CZ6	16	42.0 / 1067	31.5 / 800	61.3 / 1557	2992 / 1357
CZ4	20	42.0 / 1067	31.5 / 800	72.3 / 1837	3740 / 1696

MODULAR RACKING SYSTEM					
Rack model	Qty	W	D	H	lbs / kg
EZ1	4	20.3 / 516	23.0 / 584	22.5 / 572	748 / 339
Open front modular stacking system. Can be stacked 4 high					

RACK SELECTION CHART FOR FRONT ACCESS BATTERIES			
Floor Rack Model	Maximum number of batteries		
	PSG-12105FT	PSG-12255FT	
RB52	10	5	
RB52B	20	10	
RB52T	30	15	
RB52-4T	40	20	



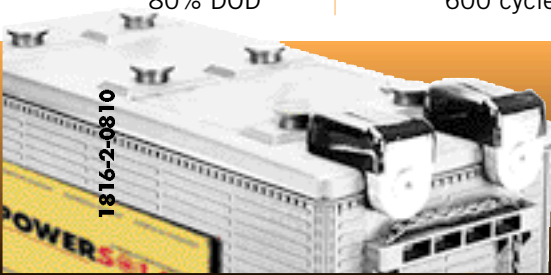
HOURS DISCHARGE RATES IN CONSTANT CURRENT (AMPERES) AND CONSTANT POWER (WATTS) @ 77°F (25°C)												
Volts per cell		1	1.5	2	3	4	5	6	7	8	20	24
		1.75	Amps	136	108	86.0	60.0	45.0	37.0	31.0	26.3	25.0
	Watts	1700	1286	1029	736	559	467	398	340	319	136	109
1.80	Amps	128	102	82.0	58.0	43.5	36.0	30.4	25.7	24.1	10.6	8.60
	Watts	1640	1211	970	699	536	446	379	321	301	130	105
1.85	Amps	121	96.0	78.0	54.0	41.5	33.6	29.0	24.8	23.2	10.1	8.30
	Watts	1605	1138	915	648	507	412	357	305	285	125	101
1.90	Amps	117	91.0	72.0	51.0	40.0	32.0	27.0	24.0	22.5	9.40	7.80
	Watts	1505	1094	860	597	476	388	332	300	285	120	97.0

CYCLE LIFE VS. DEPTH OF DISCHARGE

15% DOD	3000 cycles
25% DOD	2000 cycles
50% DOD	1100 cycles
80% DOD	600 cycles

NO TRANSPORT RESTRICTIONS

- Surface transport. Classified as non-hazardous material as relates to DOT-CFR Title 49 part 171-189.
- Maritime transport. Classified as non-hazardous material as per IMDG amendment 27.
- Air transport. Complies with IATA/ICAO, special provision A67.



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