

SOLAR

SOLAR PHOTOVOLTAIC BATTERIES
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Eastpenn
CANADA

SOLAR PHOTOVOLTAIC BATTERIES

RELIABLE, LOW-MAINTENANCE POWER

EAST PENN SOLAR FLOODED MONOBLOC BATTERIES...

are designed to offer reliable, low-maintenance power for renewable energy applications where frequent deep cycles are required and minimum maintenance is desirable. The **EAST PENN SOLAR FLOODED MONOBLOC** line includes 3 cell (6 volt) and 6 cell (12 volt) photovoltaic batteries.



Features

- ▶ Case and Cover...
- ▶ Separators...
- ▶ Retainers...
- ▶ Positive and Negative Plate...
- ▶ Specific Gravity (fully charged)...
- ▶ Cell Connections...
- ▶ Vents...
- ▶ Self discharge...

Benefits

- ▶ Heat sealed, lightweight, crack resistant, molded high impact polypropylene
- ▶ Microporous polyethylene envelope separators
- ▶ 20 mil glass mat (DC27- 10 mil)
- ▶ Antimony flat plate
- ▶ 1.275 @ 25°C (77°F)
- ▶ TP welded (through partition)
- ▶ Individual quarter - turn bayonet vent cap (DC24, DC27 - removable pod vents, 3 cells per vent)
- ▶ 1% per week

SOLAR FLOODED MONOBLOC BATTERIES

EAST PENN CANADA

A subsidiary of East Penn Manufacturing Co., Inc.

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SOLAR FLOODED BATTERIES

The East Penn Solar series of flooded electrolyte batteries is designed to offer reliable, maintenance-free power for renewable energy applications where frequent deep cycles are required.

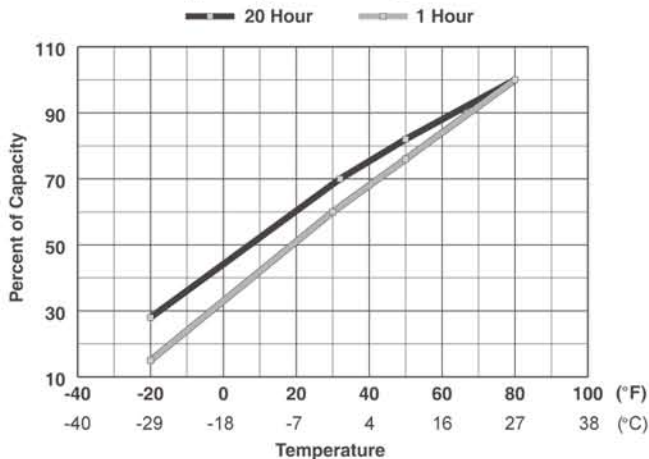
Applications

- ▶ Water pumping
- ▶ Residential
- ▶ Communications
- ▶ Cathodic protection
- ▶ Remote monitoring
- ▶ Refrigeration
- ▶ Lighting
- ▶ Aids to navigation
- ▶ Wind generation

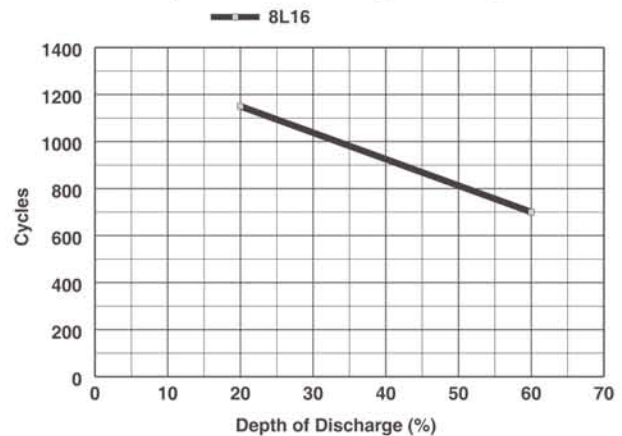
Specifications

- Voltage 6 or 12 volts nominal
- Plate alloy Low maintenance, low antimony grids
- Container/cover Polypropylene
- Charge voltage Cycle 2.40 to 2.45; Float 2.30 to 2.35 per cell; Equalize 2.50 to 2.55 per cell
- Electrolyte Sulfuric acid

Capacity vs. Temperature



Depth of Discharge vs. Cycles



▶ CYCLE LIFE FOR 8C6V, 8L16, PS2000, PS2200

700 cycles @ 60% DOD, 1150 cycles @ 20% DOD (Number of cycles based on 75 amp discharge to 1.75 vpc @ 32°C (90°F))

▶ CYCLE LIFE FOR DC24, DC27, DC31DT

200 cycles @ 80% DOD, 900 cycles @ 20% DOD (Number of cycles based on 25 amp discharge to 1.75 vpc @ 29°C (85°F))

TYPE	FOOT NOTES	PERFORMANCE LEVEL						QUARTS (LITRES) OF ACID	APPROX WEIGHT LBS (KG)	MAXIMUM OVERALL DIMENSIONS WITH STANDARD TERMINAL - INCHES (MM)		
		100 AMP HR RATE	20 AMP HR RATE	6 AMP HR RATE	DISCHARGE TIME (MINUTES) @					L	W	H
					75 AMPS	25 AMPS	23 AMPS					
8C6V	AL	376	330	270	170	--	--	10 (9.5)	97 1/2 (44.2)	11 3/4 (298)	7 (178)	14 3/8 (365)
8L16	AL	420	370	295	190	--	--	11.5 (10.9)	113 (51.3)	11 3/4 (298)	7 (178)	16 1/2 (419)
PS2000		220	216	--	114	445	--		59 (26.8)	10 1/4 (260)	7 1/8 (181)	10 7/8 (276)
PS2200		240	232	--	122	474	--		63 (28.6)	10 1/4 (260)	7 1/8 (181)	10 7/8 (276)
DC24	HA	80	75	--	--	--	150		45 (20.4)	10 3/4 (273)	6 3/4 (171)	9 3/8 (238)
DC27	HA	95	90	--	--	--	200		53 (24.0)	12 1/2 (318)	6 3/4 (171)	9 3/8 (238)
DC31DT	HMA	112	105	--	--	--	225		59 (26.8)	13 (330)	6 3/4 (171)	9 3/8 (238)

H - includes handles or lifting edges A - low maintenance, low antimony grids
M - flush manifold vented cover L - includes lifting ledges

IMPORTANT CHARGING INSTRUCTIONS:

WARRANTY VOID IF IMPROPERLY CHARGED. Do not install in a sealed container. Constant under or overcharging will damage any battery and shorten its life! Use a good constant potential, voltage-regulated charger. For 12-volt batteries, charge to at least 13.8 volts but no more than 14.1 volts at 68°F (20°C). For 6-volt batteries, charge to at least 6.9 volts but no more than 7.05 volts at 68°F (20°C). However, as the battery charges, the building internal pressure (voltage) causes resistance to the charge. Therefore, the on-charge voltage must be higher (at least 6.9V) to overcome this internal pressure (voltage) during charging.

Warranty: one year free replacement (8L16 comes with two years free replacement)

WEST: 1-800-363-3166 CENTRAL: 1-800-668-9303 EAST: 1-800-361-5935

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