



# PHOTOVOLTAIC BATTERIES

Authorized Agent:



香港可再生能源有限公司  
Hong Kong Renewable Energy Co. Ltd.

## FLOODED - MONOBLOC

### **DEKA 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 **DEKA SOLAR FLOODED MONOBLOC** include 3 cell (6 volt) and 6 cell (12 volt) photovoltaic batteries.



### FEATURES & BENEFITS

Case and Cover	Heat sealed, lightweight, crack resistant, molded high impact polypropylene.
Separators	Microporous polyethylene envelopes/separators
Retainers	20 mil glass mat (DC27- 10 mil).
Positive and Negative Plate	Antimony flat plate
Specific Gravity (fully charged)	1.275 @ 25°C (77°F).
Cell Connections	TP welded (through partition)
Vents	Individual quarter - turn bayonet vent cap (DC27 - removable pod vents, 3 cells per vent)
Self discharge	4% per month
Cycle life for 8C11, 9C11, 8L16, GC15	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 DC27	200 cycles @ 80% DOD, 900 cycles @ 20% DOD (Number of cycles based on 25 amp discharge to 1.75 vpc @ 29°C (85°F))

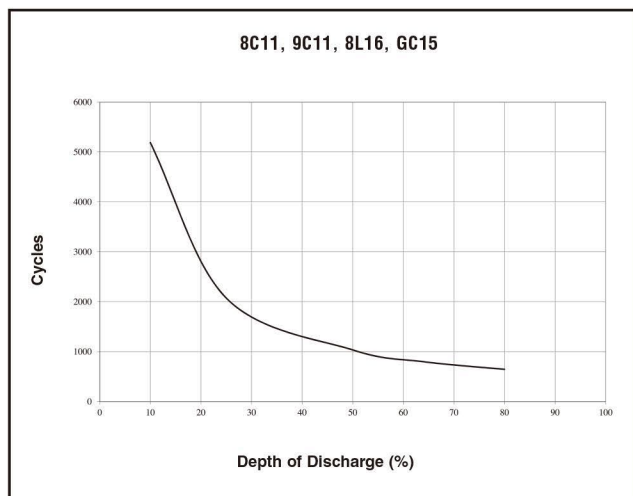


## PHOTOVOLTAIC BATTERIES

Photovoltaic Charging Parameters		
Bulk Charge	Max Current (amps)	30% of 20 Hr Rate
Absorption (Regulation) Charge	Constant Voltage	2.40 - 2.45 vpc
Float Charge	Constant Voltage	2.30 - 2.35 vpc
Equalize Charge	Constant Voltage	2.50 - 2.55 vpc
Temperature Coefficient	0.003 v / °C	

Cut-off parameters per charge & equalize intervals are application specific and will vary dependent upon site specific characteristics such as temperature, days of autonomy, array to load ratio, etc.

Cycle Life vs Depth of Discharge at +25°C (77°F)\*

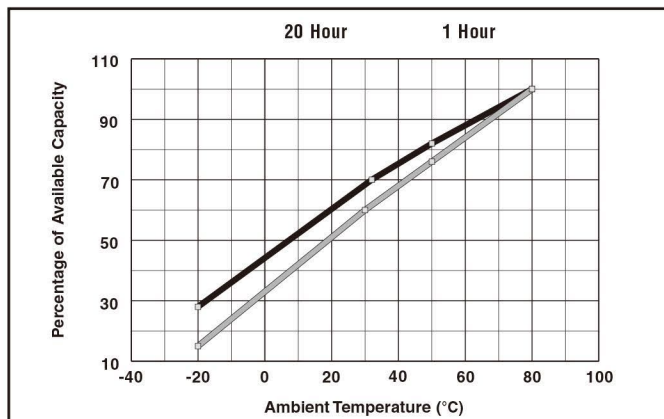


Cycle Chart applies to types with similar design characteristics, ex., U1, 22NF, 24, 27, 31.

The solar battery excels in cycling applications.

\*Dependent upon proper charging and ambient temperatures.

Capacity vs. Operating Temperature



**Capacity vs. Operating Temperatures:** Above are the changes in capacity for wider ambient temperature range, giving the available capacity, as a percentage of the rated capacity, at different ambient temperatures. The curves show the behavior of the battery after a number of cycles.

### Terminal Information



TYPE NO.		FOOTNOTES	PERFORMANCE		SHORT CIRCUIT CURRENT (AMPS)	QUARTS (LITERS) OF ACID	APPROXIMATE WEIGHT lbs. (kgs.)		MAXIMUM OVERALL DIMENSIONS inches (mm)		
			20 AMP HR. RATE	100 AMP HR. RATE			WET	DRY	L	W	H
WET	DRY										
6-VOLT SOLAR FLOODED MONOBLOC											
8C11	8C11D	11,17,19,25,30,34,V	235	260	2636	8 (7.6)	66.5 (30.2)	48 (21.8)	11% (298)	7 (178)	11½ (292)
9C11	9C11D	11,17,19,25,30,34,V	250	290	2465	7½ (7.1)	73 (33.1)	52½ (23.8)	11% (298)	7 (178)	11½ (292)
8L16	8L16D	11,17,19,25,30,34,W	370	420	2339	11½ (10.9)	113 (51.3)	83 (37.6)	11% (298)	7 (178)	16% (419)
GC15	GC15D	11,30,34,U	230	—	2620	—	63 (28.6)	44 (20)	10% (260)	7% (181)	10% (276)
12-VOLT SOLAR FLOODED MONOBLOC											
DC27	—	11,17,35,U	90	95.5	2339	—	53 (24.0)	—	12½ (318)	6% (171)	9% (238)

### FOOTNOTES:

- 11 - Low maintenance-low antimony grids
- 17 - Includes Handle
- 19 - Includes lifting ledges
- 25 - With individual vent caps
- 30 - Available dry-add "D" suffix to part number
- 34 - Ratings after 15 cycles
- U - Molded-in offset SAE post and vertical 5/16" NEG., 5/16" POS. stainless studs & locking hex nuts
- V - Molded-in offset SAE post and vertical 5/16" NEG., 5/16" POS. stainless studs
- W - "L" type terminal w/ 5/16" diameter hole (T882)

All batteries manufactured with gray polypropylene cases and covers except where noted.

- **IMPORTANT CHARGING INSTRUCTIONS:** 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.

### Charge Requirements (25°C)

Charge / Absorption / Equalize - 2.35 to 2.43 v.p.c.

Float - 2.24 to 2.26 v.p.c.

The open circuit voltage of a fully charge battery is 2.13 v.p.c. at 77°F (25°C).

### Authorized Agent:



香港可再生能源有限公司  
Hong Kong Renewable Energy Co. Ltd.

地址: 香港九龍旺角彌敦道610號荷李活商業中心18樓

電話: 2960 0193

郵箱: cmli@live.hk

傳真: 2960 0553

網址: <http://www.hkre.com.hk/>