

Stinger Battery Operated Energizers

Product Bulletin

Functional - Effective - Practical:

- designed for low maintenance charging of vegetated fences for domestic livestock

Efficient:

- leading technology for efficient conversion of battery energy to fence charge

Advanced Technology:

- industry's first battery capacity monitor for improved battery management

Reliable:

- designed, manufactured and serviced in Edmonton, AB Canada for Stinger Products by the staff of the company that pioneered capacitive discharge electric fence controllers for un-insulated fences - over 30 years of experience in Western Canada conditions.

- output transformer is redesigned to provide extra high voltage isolation for enhanced protection from fence induced lightning surges.

- energy storage capacitors are special pulse tested types to provide exceptional service life.

- additional transient suppressing components are used to protect more sensitive electronic components from voltage stress caused by fence induced lightning surges.

- simplified 3 year extended warranty even covers lightning damage:

- 1 year dealer exchange with new unit,

- 2 extra years factory repair or rebuilt exchange where customer pays a nominal shipping and handling charge.

- After-warranty factory repair or rebuilt exchange for a flat rate fee plus shipping charges.

DC1J special features:

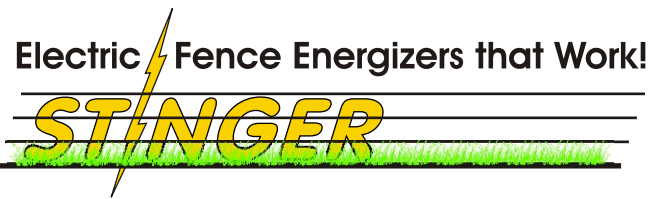
- peak output power 65,000W @ 3,000V
- summer battery capacity 33 days / 100 amp-hour

DC2J special features

- peak output power 84,000W @ 3,000V
- daylight harvesting - slows pulse rate to 2.5seconds between 10pm and 4am to save battery power.

(For wildlife control, you can force the unit to stay running at 1.25 second rate by covering the light sensor with a piece of black electrical tape.)

- summer battery capacity 23 days / 100 amp-hour



Power Source:

- operates from 12V dc lead-acid or gel-cell type rechargeable battery (battery supplied by user).
- a solar charging panel (panel supplied by user) can be applied to the battery to maintain and extend the battery life. The size of the solar panel depends on your latitude, the seasons of use, weather conditions, and mounting of the panel.

Battery Capacity Monitor:

- battery capacity monitor indicates the remaining capacity in the battery to provide early warning of when the battery needs to be recharged.
- battery capacity monitor is temperature compensated
- provides indication of remaining capacity by blinking an indicator.
- helps reduce freezing damage to the battery when used in the winter.
- increases the pulse period to 2.5 seconds when there is less than 25% of the battery capacity left to extend operating life and provide warning of low charge.
- unit shuts off when the battery capacity has been consumed - helps to minimize damage to the battery from excessive discharge.

Fence Guard Voltage Monitor:

- pulse measuring circuit with long life LED indicator.
- blinks every output pulse when the fence voltage is >3,000Volts.
- blinks every other pulse when fence voltage is >2,000Volts and <3,000Volts.

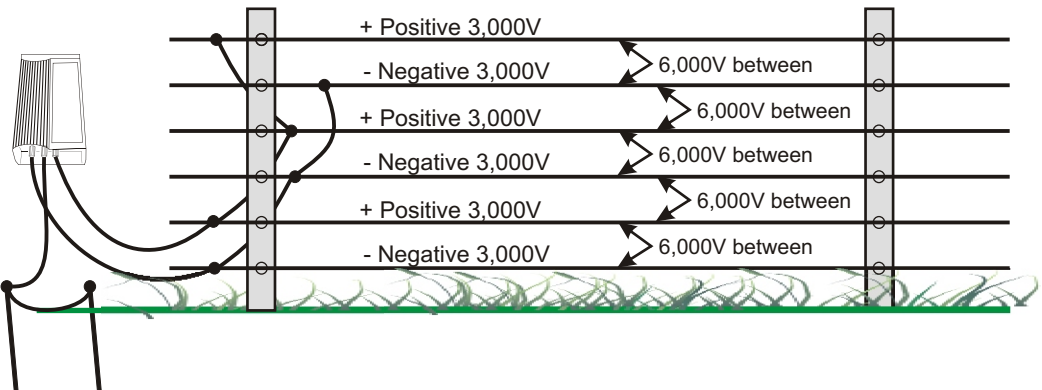
DC123J special features (factory order only)

- switch selectable output power level
 - * low 65,000W @ 3,000V for clean, dry, frozen fences
 - * medium 84,000W @ 3,000V for vegetated fences
 - * high 116,000W @ 3,000V for heavy vegetated fences
- switch selectable pulse period
 - * 1.25 seconds for wildlife or stubborn livestock control
 - * Auto daylight harvesting mode - slows down at night
 - * 2.5 seconds to double battery life
- summer battery capacity (days / 100 amp-hr)

Power/Period	1.25 sec	Auto	2.5 sec
Low	30 days	38 days	60 days
Medium	20 days	22 days	39 days
High	14 days	16.5 days	28 days

Bipolar Electric Fencing for Wildlife Control: A fence used for wildlife control must have multiple wires charged. The fence must be high enough that the wildlife will not jump over it. The wires must be close enough together so that the animal will contact a pair of wires when they attempt to crawl through the fence. The vegetation must be cut so that the fence is clearly visible and there is no vegetation load on the charged wires.

A Bipolar charged fence applies a positive voltage to one wire and a negative voltage to the adjacent wires. This reduces the voltage stress on the insulators and maintains a very high guard voltage between wires to shock the animal when it contacts between two wires. All wires are "hot" so it is also better than having alternate wires charged and grounded.



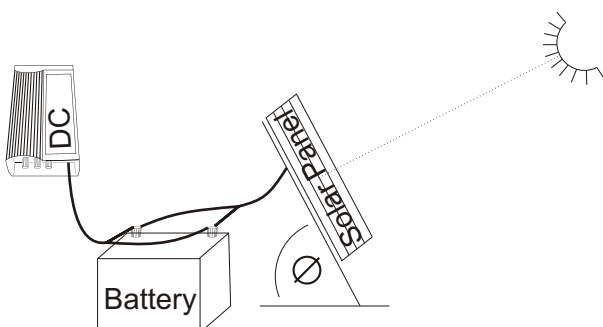
- DC1JW (for wildlife control) special features (factory order only)**
 note: special fence construction is critical for effective wildlife control.
- high output voltage (works best with good insulators and controlled vegetation).
 - 60,000W @ 5,000V (+2,500V GND -2,500V)
 - bipolar output for charging alternate wires, reduces leakage losses, provides higher guard voltage for wildlife.
 - continuous fast output pulse rate for more effective wildlife control.
 - summer battery capacity 30 days / 100 amp-hour.

- DC2JW (for wildlife control) special features (factory order only)**
 note: special fence construction is critical for effective wildlife control.
- high output voltage (works best with good insulators and controlled vegetation)
 - 80,000W @ 5,000V (+2,500V GND -2,500V)
 - bipolar output for charging alternate wires, reduces leakage losses, provides higher guard voltage for wildlife.
 - continuous fast output pulse rate for more effective wildlife control.
 - summer battery capacity 20 days / 100 amp-hour.

Solar Panel Sizing (Watts-with safety factor of 50%): (You need a battery capacity that will run the energizer for at least 2 weeks of bad weather and poor sun conditions in the summer and 4 weeks of reserve for winter operation) (By watching the battery capacity monitor, you can recharge the battery occasionally and cut panel size and battery capacity to half)

Model/Season	Peace River Country Ontario		Edmonton, Saskatoon		Lethbridge, Regina, Winnipeg	
	Spring-Fall	Year-round	Spring-Fall	Year-round	Spring-Fall	Year-round
DC 1J	15 W	40W	15W	25W	15W	25W
DC 2J	30W	80W	30W	50W	30W	50W
DC 3J *	50W	100W	50W	80W	50W	80W

* These values are for running at 3J power level at fastest pulse rate. In dry and frozen conditions the DC123J model can be switched to 1J or 2J power level or run on daylight harvesting mode or 2.5 second period to increase battery life and reduce solar panel size.



Optimum Solar Panel Angle from Flat				
Ø deg	Dec	Mar	Jun	Sep
Regina	73	50	27	50
Edmonton	76	53	30	53
Peace River	81	58	35	58