

KELIN SOLAR

Quotation - Winter Water Motion System

Name		DATE		Tel:	
Address		Quote by		Fax:	
Town/Prov		P. Code		E-mail:	

Notes

DC Powered Pump System Performance

	1 160	2 160	3 160	4 160	5 160	
	Head/ Day	Head/ Day	Head/ Day	Head/ Day	Head/ Day	
	95	190	286	381	476	
	\$2,400.00	\$3,080.00	\$3,965.00	\$4,620.00	\$5,415.00	

110VAC Powered Pump System Performance

24" Bowl (\$309 additional) - max CC prs - 250	36" Bowl (\$329 additional) - max CC prs - 600
110VAC System w/ HD St.Steel pump	110VAC System w/ HD St.Steel pump
\$1,925.00	\$1,945.00

\$3400

Items Included in DC System

- 1 Pump & 30 ft of wire
- Solar Panel(s) - *as per system above*
- Panel Stand(s) - *(single, double or triple - as appropriate)*
- 1 Regulator c/w Low Volt Disconnect
- 1 DC Motion Sensor Assembly
- Battery Box *(one per four batteries)*
- 1 Poly Hose & Wiring Package *(Prewired Plug-in Ready)*
- 1 Drainback Filter Assembly

Items Included in AC System

- 1 Bowl - HD Plastic - *(* 24" or **36" as noted above)*
- 1 Standard AC Pump & 30 ft of wire
- 1 AC Motion Sensor Assembly
- 1 Drainback Filter Assembly
- 16' Poly Hose - 1 in. poly

Required But Not Included

- Post - 2-3/8" dia (one per 2 or three panels)
- Batteries *(min. 1 per 50-75W)*

System Options

Additional Motion Switch Wire <i>(18 ga - per ft)</i>	\$0.35
Deep Cycle Battery - 6V 255Ah	\$315
-12V 105Ah	\$325
Upgrade 24 to 36 in bowl	add \$20
Upgrade Standard DC Pump to High Output	add \$185
Wind Turbine - 200W wired, ready to connect	\$2,350
Upgrade to High Lift DC Pump <i>(St. Steel pump - 20 ft of lift at 12V, and 60 ft of lift at 24V)</i>	\$3,300
Summer Conversion Kit	\$700
24" x 20' Double Wall Poly Casing	\$1250
36" x 3' Double Wall Poly Stub	\$525

Features

Solar Panel - High Efficiency Polycrystalline Regulator - prevents overcharging of batteries, polarity protected (prevents damage by reverse hook-up) Low-voltage disconnect (LVD) - prevents over-discharging. Motion-Sensor - turns pump on when livestock arrive and turns pump off after in 30-60 seconds. Float Switch - turns pump off/on. Pump Output/Lift - For standard DC pump - max 5-6 gpm (imp. gals) w/ max 16 ft lift. For high output DC Pump max 8-10 gpm with max 12 ft lift. For AC pumps - 6-7 gpm with max 16 ft lift. NOTE: DC System can be 12V or 24V but if 24V then the system must have panels in pairs - i.e. 2,4, etc

Assumptions

Estimated output is based on an average solar winter day of 2.5 hours (southern Canadian prairies - for areas more northerly, oversize the system accordingly). It is assumed that an average beef cow/yearling consumes about 6 imp. gal (7.2 US gals or 27 L) per day in average winter conditions. Solar collection goes up in summer - perhaps not as much as does water consumption.

Recommendations

It is recommended that the system be checked as often as required to ensure proper watering for the animals.

Warranty

Solar Panels - 20 yrs Pump - 1 yrs System - 1 yr

Prices guaranteed for 30 days - FOB Lumsden, tax extra