

# Solar Powered Drip Irrigation Kits

A powerful combination to empower the small farm holders

## Solar Power:

- ✓ Free energy
- ✓ Clean energy conserving mother earth
- ✓ 25 years of solar PV module life
- ✓ Easy to operate and maintain
- ✓ Sustainable

Empowers  
the small  
farmers with  
drip irrigation  
technology

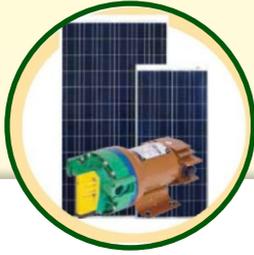


## Drip Irrigation Kits:

- ✓ Do-it-yourself Kit
- ✓ Pre-designed; requires no survey, no design
- ✓ Convenient box packing; contains all components
- ✓ Ideal for Mass Distribution. Used by Govt. and Developmental Agencies for transforming Small Farm Holders' Agriculture



# Solar Pumps from Driotech used for Drip Irrigation Kits



## Nano Solar Pump

### Technical specifications

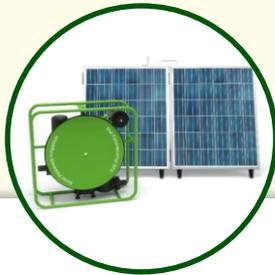
- ▶ Solar PV module: 80 - 160 Wp
- ▶ Total max head: 40 m
- ▶ Max. discharge: 700 LPH



## Sunlight Solar Pump

### Technical specifications

- ▶ Solar PV module: 160 - 520 Wp
- ▶ Total max head: 40 m
- ▶ Max. discharge: 2400LPH



## SE1 & SF2

### Technical specifications

- ▶ Solar PV module: 80 & 120 Wp
- ▶ Total max head: 15 m
- ▶ Max. discharge: 3600 LPH



## SF2H

### Technical specifications

- ▶ Solar PV module: 120, 180, 240 & 300Wp
- ▶ Total max head: 45 m
- ▶ Max. discharge: 1500 LPH



## Submersible Pump 1320 Wp

### Technical specifications

- ▶ Solar PV module: 1320Wp
- ▶ Total max head: 73 m
- ▶ Max. discharge: 16758 LPH



## Submersible Pump 1980 Wp

### Technical specifications

- ▶ Solar PV module: 1980Wp
- ▶ Total max head: 73 m
- ▶ Max. discharge: 24882 LPH



For details please visit our website:

<http://www.driotech.info/solar-pump-brochure>



# Driptech specialises in Drip Irrigation Kits

– Offers kits for wide ranging applications

## DT-GravityKit

Operates on gravity pressure

Used for row crops

- Solution for using drip irrigation when:
  - Supply of water / electricity is irregular
  - Available pump is of low pressure & discharge
- Can be used even with treadle pump/ hand pump



## InstaKit-Solar

Operated directly by pump

Used for row crops

- No need for overhead tank like in Gravity run Irrigation
- Works on ultra-low pressure (0.2kg/cm<sup>2</sup>)
  - Requires low HP Pump
  - Saves Electricity/Diesel



## DT-RainKit

Operated directly by pump

Used for close spaced crops

- Works on low pressure
- Substitute for micro and mini Sprinklers



## SprinklEzi-Solar

Ultra Low Pressure Sprinkler

Easy to Shift the Sprinkler

- Reduction in Power Consumption
- Huge labour saving
- Economical compared to the traditional Sprinklers
- Works on ultra-low pressure



For details please visit our website:

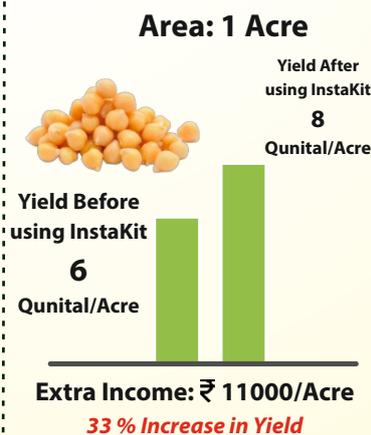
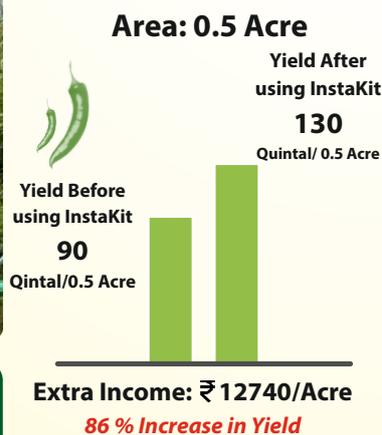
<http://www.driptech.info/dripirrigationkits/>



## Meet Farmers Using Driptech's Drip kit



Satya Narayan Sharma  
Beneficiary of  
**Reliance Foundation**



Hemraj Laxman Kolhe  
Beneficiary of **World Vision**



Read about many of them:

<https://youtu.be/ME9uBT4CwqA>



## Incredible Benefits of Drip Irrigation



**50%**  
Water Saving



**30%**  
Fertilizer Saving



**30% to 70% Yield Increase**



**30%**  
Energy Saving



**Labour Saving**



**Improvement in quality and uniformity of produce**

## How Drip Irrigation compliments Solar Pumps?

 Drip Irrigation saves 50% water. Thus, same pump can irrigate double the area!



Flood irrigation

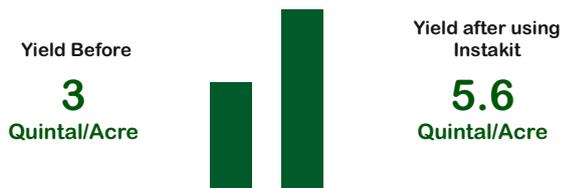


Drip irrigation

 Drip irrigation enhances the yield and hence the profitability. So, the investment of solar pump is recovered faster

**Begavadiya Zalabhai**  
**Changod, Gujarat**

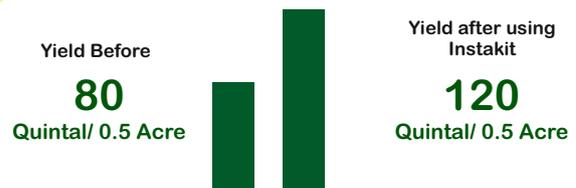
**Acre 1**  
**Crop: Groundnut**



**86 % Increase in Yield**  
 **Extra Income: ₹ 12740/Acre**

**Praveen Choudhary**  
**Bilochi, Amer, Rajasthan**

**Acre 0.5 Acre**  
**Crop: Tomato**



**50 % Increase in Yield**  
 **Extra Income: ₹ 80000/0.5 Acre**

## Suitable Combination of Kit and Pumps

Solar Pump			Best Suitable DripKit																
			DT-GravityKit				InstaKit-SLR (Solar Model)					DT-RainKit					SprinkEzi-SLR (Solar Model)		
Water Source	Pump Model	Wattage	500M <sup>2</sup>	1000M <sup>2</sup>	2000M <sup>2</sup>	4000M <sup>2</sup>	500M <sup>2</sup>	1000M <sup>2</sup>	2000M <sup>2</sup>	4000M <sup>2</sup> (1 Acre)	10000M <sup>2</sup> (1 Hectare)	500M <sup>2</sup>	1000M <sup>2</sup>	2000M <sup>2</sup>	4000M <sup>2</sup> (1 Acre)	10000M <sup>2</sup> (1 Hectare)	2000M <sup>2</sup>	4000M <sup>2</sup> (1 Acre)	
River / Pond / Open Well	Nano	100	Yes																
	Nano	160		Yes	Yes														
	SunLight	265					Yes												
	SunLight	325						Yes	Yes										
	SunLight	530															Yes		
	SF2	120	Yes	Yes	Yes	Yes													
	SF2H	120	Yes	Yes	Yes	Yes	Yes											Yes	
	*17 DCSMP 1800	550										Yes							
	*15 DCSCRI 2700	1100											Yes	Yes	Yes	Yes	Yes		Yes
Bore Well	Submersible Pump	1320	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	
	Submersible Pump	1980								Yes						Yes			

### Note

The pump required depends not only on the Kit to be run but also, on the distance of the water source from the plot and the depth of the water table in it. Here, the following assumption is made for suggesting the compatibility

- Distance of the water source from the field: 100 mtr
- Depth of water: 7 mtr & 50 mtr for river / pond /open well and bore well respectively.

For determining the pump required in your field, please contact us.

\* These models are not sold by Dripteck but, can be made available by us on your request.

## General Guidelines for Using Solar Pump for Dripteck's Drip Kits\*

SE1 & SF2		To operate the Various Kits by SE1 & SF2 Solar Pumps									
Type of Kit	Option	Plot Size (m <sup>2</sup> )	Tank height in meter	Total Water requirement per day in litre	No. of Sifts	Shift water flow rate in litre/hr	Total Irrigation Time in (App.hrs)	Shift Time in (App.hrs)	Head required to operate system	Suitable Pump Model available with us	Min. Tank Size in litre
DT-Gravitykit		500 m <sup>2</sup>	2	2000	1	933	2	2	14	SF2 (120W)	1000
		1000 m <sup>2</sup>	3	4000	1	2083	2	2	14		1000
	Day 1	2000 m <sup>2</sup>	3.5	4000	1	2083	2	2	14		2000
	Day 2		3.5	4000	1	2083	2	2	14		2000
	Day 1	1 acre	4	8000	2	2083	4	2	14		2000
	Day 2		4	8000	2	2083	4	2	14		2000
		500 m <sup>2</sup>	2	2000	1	933	2	2	14	SE1 (60W)	1000
		1000 m <sup>2</sup>	3	4000	1	2083	2	2	14		1000
	Day 1	2000 m <sup>2</sup>	3.5	4000	1	2083	2	2	14		2000
	Day 2		3.5	4000	1	2083	2	2	14		2000
	Day 1	1 acre	4	8000	2	2083	4	2	14		2000
	Day 2		4	8000	2	2083	4	2	14		2000
		500 m <sup>2</sup>	2	2000	1	933	2	2	14	SF2 (120W)	1000
		1000 m <sup>2</sup>	3	4000	1	2083	2	2	14		1000
	Day 1	2000 m <sup>2</sup>	3.5	4000	1	2083	2	2	14		2000
	Day 2		3.5	4000	1	2083	2	2	14		2000
	Day 1	1 acre	4	8000	2	2083	4	2	14		2000
	Day 2		4	8000	2	2083	4	2	14		2000

\* These are general guidelines. In practice, one has to take into account the actual conditions

SF2H		To operate the Various Kits by SF2H Solar Pumps									
Type of Kit	Option	Plot Size (m <sup>2</sup> )	Tank height in meter	Total Water requirement per day in litre	No. of Sifts	Shift water flow rate in litre/hr	Total Irrigation Time in (App.hrs)	Shift Time in (App.hrs)	Head required to operate system	Suitable Pump Model available with us	Min. Tank Size in litre
DT-Gravitykit		30 m <sup>2</sup>	1.5	120	1	34	4	4	15	SF2H 120 WP	100
		100 m <sup>2</sup>	1.7	400	1	113	4	4	15		200
		250 m <sup>2</sup>	2	1000	1	467	2	2	15		500
		500 m <sup>2</sup>	2	2000	1	933	2	2	15		1000
		1000 m <sup>2</sup>	3	4000	1	2083	2	2	15		1000
		2000 m <sup>2</sup>	3.5	8000	2	2083	4	2	15		2000
	Day 1	1 acre	4	8000	2	2083	4	2	15		2000
	Day 2		4	8000	2	2083	4	2	15		2000
InstaKit-SLR	Without Ventury	500 m <sup>2</sup>	NA	2000	1	933	2	2	15	SF2H 120 WP	NA
Type of Kit	Option	Size	No of Sprinkler run at one time	Total Water requirement per day in litre	No of Shift	Shift water flow rate in litre/hr	Total timing to irrigate	Shift Time (App. hrs)	Head	Pump Model suitable available with us	Min Tank Size in litre
SprinklEzi -Solar : 5022-4		2000m <sup>2</sup>	3	7000	14	1064	7	0.5	22	SF2H (120/180 WP)	NA

Nano & Sunlight		To operate the Various Kits by Nano and Sunlight Solar Pumps									
Type of Kit	Option	Plot Size (m <sup>2</sup> )	Tank height in meter	Total Water requirement per day in litre	No. of Sifts	Shift water flow rate in litre/hr	Total Irrigation Time in (App.hrs)	Shift Time in (App.hrs)	Head required to operate system	Suitable Pump Model available with us	Min. Tank Size in litre
DT-Gravity Kit		500 m <sup>2</sup>	2	2000	1	933	2	2	15	Nano (100 WP)	1000
		1000 m <sup>2</sup>	3	4000	1	2083	2	2	15	Nano (160 WP)	1000
	Day 1	2000 m <sup>2</sup>	3.5	4000	1	2083	2	2	15		2000
	Day 2		3.5	4000	1	2083	2	2	15		
InstaKit-SLR		500 m <sup>2</sup>	NA	2000	1	933	2	2	15	Sunlight (265 WP)	NA
		1000 M <sup>2</sup>		4000	1	1867	2	2	15	Sunlight (325 WP)	
		2000 M <sup>2</sup>		8000	2	1556	6	2	15		
	Day 1	1 acre	NA	16000	2	1556	6	2.5	15		
	Day 2			16000	2	1556	6	2.5	15		
	Type of Kit	Option	Size	No of Sprinkler run at one time	Total Water requirement per day in Litre	No of Shift	Shift water flow rate in litre/hr	Total timing to irrigate	Shift Time (App. hrs)	Head	
SprinklEzi -Solar (5022-4)		2000 m <sup>2</sup>	3	7000	14	1064	7	0.5	30	Sunlight (530 WP)	NA

\* These are general guidelines. In practice, one has to take into account the actual conditions



17 DCSMP 1800 & 15 DCSCRI 2700		To operate the Various Kits by 17 DCSMP 1800 & 15 DCSCRI 2700									
Types of Kit	Option	Plot Size (m <sup>2</sup> )	Tank height in meter	Total Water requirement per day in litre	No. of Sifts	Shift water flow rate in litre/hr	Total Irrigation Time in (App.hrs)	Shift Time in (App.hrs)	Head required to operate system	Suitable Pump Model available with us	Min. Tank Size in litre
InstaKit-SLR		1 Acre 4000m	NA	16000	2	3111	5	2.5	15	17 DCSMP 1800 550 WP	NA
	Day 1	1 Hectare	NA	20,000	2.5	6667	7.5	2.5	15	17 DCSMP 1800 550 WP	NA
	Day 2		NA	20,000	2.5	6667	7.5	2.5	15		NA
SprinklEzi-Solar : 5022-4		4000m <sup>2</sup>	NA	14,000	14	2128	6.5	0.5	30	15 DCSCRI2700- 1100 WP	NA
DT-Rainkit		500m <sup>2</sup>	NA	2,000	3	2500	1	0.3	30	15 DCSCRI2700 -1100 WP	NA
		1000m <sup>2</sup>	NA	4,000	7	2143	2	0.3	30	15 DCSCRI2700 -1100 WP	NA
		2000m <sup>2</sup>	NA	8,000	13	2308	3.5	0.3	30	15 DCSCRI2700 -1100 WP	NA
		4000m <sup>2</sup> 1 Acre	NA	8,000	13	2308	3.5	0.3	30	15 DCSCRI2700 -1100 WP	NA
				8,000	13	2308	3.5	0.3	30		
		10,000m <sup>2</sup> 1 Hectare	NA	20,000	17	4412	4.5	0.3	30	15 DCSCRI2700 -1100 WP	NA
	20,000			17	4412	4.5	0.3	30			

Submersible Pump		To operate the Various Kits by Submersible Pump									
Types of Kit	Option	Plot Size (m <sup>2</sup> )	Tank height in meter	Total Water requirement per day in litre	No. of Sifts	Shift water flow rate in litre/hr	Total Irrigation Time in (App.hrs)	Shift Time in (App.hrs)	Head required to operate system (m)	Suitable Pump Model available with us	Min. Tank Size in litre
Gravity Kit		500m <sup>2</sup>	2	2000	1	933	2	2	50	Submersible Pump 1320	1000
		1000m <sup>2</sup>	3	4000	1	2083	2	2	50	Submersible Pump 1320	1000
	Day 1	2000m <sup>2</sup>	3.5	4000	1	2083	2	2	50	Submersible Pump 1320	2000
	Day 2										
	Day 1	1 Acre	4	8000	2	2083	4	2	50	Submersible Pump 1320	2000
Day 2											
InstaKit - SLR		500m <sup>2</sup>	NA	2000	1	933	2	2	50	Submersible Pump 1320	NA
		1000m <sup>2</sup>	NA	4000	1	1867	2	2	50		
		2000m <sup>2</sup>	NA	8000	2	1556	6	2	50		
	Day 1	1 Hectare	NA	20,000	3	6667	7.5	2.5	50	Submersible Pump 1320	NA
	Day 2										
	Day 1	1 Acre	NA	16,000	2	1556	6	2.5	50	Submersible Pump 1980	NA
Day 2											

\* These are general guidelines. In practice, one has to take into account the actual conditions

Submersible Pump	To operate the Various Kits by Submersible Pump										
Types of Kit	Option	Plot Size (m <sup>2</sup> )	Tank height in meter	Total Water requirement per day in litre	No. of Sifts	Shift water flow rate in litre/hr	Total Irrigation Time in (App.hrs)	Shift Time in (App.hrs)	Head required to operate system	Suitable Pump Model available with us	Min. Tank Size in litre
DT-Rainkit		500m <sup>2</sup>	NA	2000	3	667	1	0.3	50	Submersible Pump 1320	NA
		1000m <sup>2</sup>	NA	4000	7	571	2	0.3	50		
		2000m <sup>2</sup>	NA	8000	13	615	3.5	0.3	50		
	Day 1	1 Acre	NA	8000	13	1176	3.5	0.3	50	Submersible Pump 1980	NA
	Day 2										
Day 1	1 Hectare	NA	20,000	17	1176	4.5	0.3	50	Submersible Pump 1320	NA	
Day 2											
SprinkEzi-SLR (Solar Model)		2000m <sup>2</sup>	NA	7,000	14	500	7.5	0.54	50	Submersible Pump 1320	NA
		4000m <sup>2</sup>	NA	14,000	12	1167	6.4	0.54	50	Submersible Pump 1320	NA

*\* These are general guidelines. In practice, one has to take into account the actual conditions*



## Solar Powered Dripteck's Drip Kit - a project by Land-o-Lake, Malawi

