



# ***GO GREEN, GO SOLAR***

## **UNIVERSAL SOLAR PUMP CONTROLLER**

**CERTIFIED BY**





## **ABOUT US**

### **OUR DREAM IS TO UNLOCK THE POTENTIAL OF SOLAR ENERGY**

BY USING OUR TECHNOLOGY, EXPERIENCE, SYNERGY & TO DESIGN TO DELIVER PRODUCTS IN SOLAR CONTROLLERS THAT MAKE POSITIVE LIVELIHOOD CHANGES EVERYWHERE, WHERE SUN GOES.

## **WHO WE ARE**

Nimesh Sheth and Approva Bhatt founded Kisan Solar and developed 3rd Generation Solar Power Controller unit called SPCM(Sinusoidal Pump Controller with MPPT) for Solar Water Pumping. Since then this “Smart Controller” has already been recognized and awarded certificates of excellence by various agencies. Then they invented a Life changing Product called U&SPC (Universal & Single Phase Controller) for Irrigation as well as Domestic use & U&SPC is the only controller of its kind in the World which is Patented and Certified by MNRE accredited Labs.

**TAG Solar System LLP** (Global Distributor) is the Marketing & Distribution arm of Kisan Solar and working closely with many Big Names of the Industry and State Governments.

Coming from diverse backgrounds; our team members offer their unique experiences to collaborate in offering products and services using New Generation Technologies.

## WHAT WE DO

**TAG Solar System LLP** specializes in offering Solar Controllers using advanced technology that not only offers more Power to the Customers, with far lesser maintenance but also increase in Productivity & Income; Customers can manage and operate their systems independently and there is No need of dependency on Grid or Battery Bank. We do this by offering solutions based on their needs through components that offer best performance with least maintenance requirements.

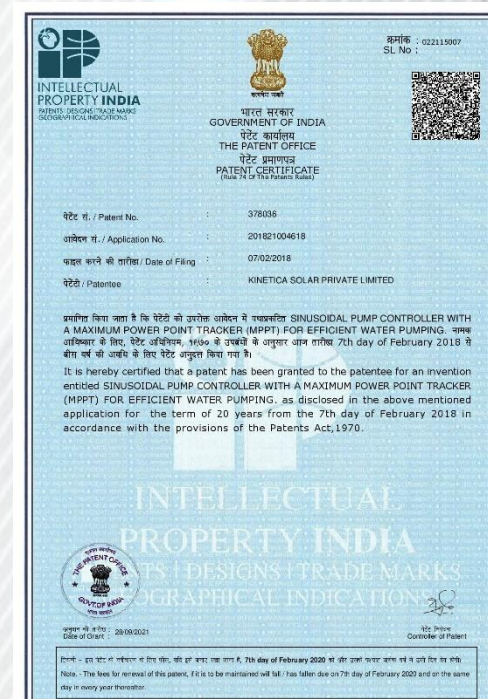
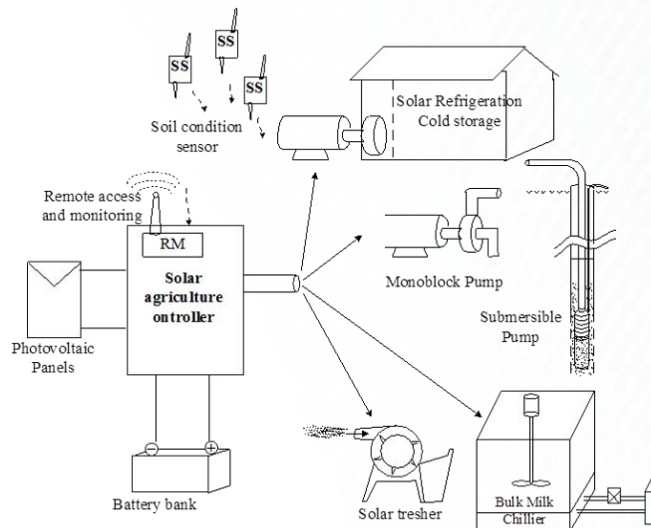
## OUR VISION

Our vision "TO CHANGE LIVES FOR THE BETTER, FOREVER" arises from the belief that no one is fully empowered unless they have the ability to be independent. By providing energy solutions that are generated and consumed at the point. Which offers more Power and cleaner Energy. We see the Cleaner Energy as segment that needs to be developed for the sustainable growth of a nation.

We can generate power whenever there is Sun.

A photograph of an Intellectual Property Registration Certificate from the Government of India. The certificate is for the logo of 'CLEANER ENERGY', which consists of a stylized sun icon above the text 'CLEANER ENERGY'. The certificate includes the registration number 022115907, the date of registration 12/06/2019, and the class of goods/services 37. It also features the Indian national emblem and a QR code.

**The block diagram of Universal solar pump/agriculture controller: Fig. 1.**



## WHY USPC...?



1. USPC technology converts off grid solar installation into 3 phase “local grid”.
2. USPC can power any heavy 3 phase machine using solar irradiance, to process all agricultural crops and cold storages. Installing USPC is synonymous to providing a 3 phase grid.
3. USPC uses solar energy as fuel compared to coal, oil or gas. Solar energy is totally free compared to fossil fuels like coal, gas or oil. Unlike fossil fuels no transportation cost for solar irradiance.
4. USPC can power any machine that could be run with electric power. 5. USPC can facilitate in double the income / profit of farmers as the same energy can be used to do many other jobs apart from only irrigation.





# TAG UNIVERSAL CONTROLLER



## EXCLUSIVE ADVANTAGE FOR BENEFICIARIES

- DESIGNED TO INCREASE LAND AND RURAL LABOUR PRODUCTIVITY, DECREASE INPUT COST OF FERTILIZER & ENERGIES IN AGRICULTURE & PROPEL SUSTAINABLE ORGANIC FARMING.
- DESIGNED TO TRANSFORM FARMERS FROM PRIMARY PRODUCERS TO FINISHED PRODUCTS & ADD VALUE TO THE CROP AND INCREASE THEIR INCOME.
- DESIGNED TO PROVIDE FREE ENERGY (NO FOSSIL FUEL) TO POST HARVEST OPERATIONS LIKE THRESHING, WINNOWING, CHAFFING ETC.
- PROTECTION AGAINST REVERSE INPUT: TAG SOLAR CONTROLLER IS DESIGNED TO PROTECT AGAINST REVERSE POLARITY.
- AUTO-CUT FOR DRY RUNNING: THE CONTROLLER AUTOMATICALLY CUTS OFF POWER IF THE MOTOR PUMP IS RUNNING IN A DRY CONDITION, PREVENTING DAMAGE TO THE PUMP.
- REMOTE MONITORING: TAG SOLAR CONTROLLER ALLOWS FOR REMOTE MONITORING, ENABLING CONTROL AND MONITORING OF THE.



## INDUSTRIES

- DAIRY INDUSTRIES
- FISHERY
- MEAT INDUSTRIES
- COFFE/TEA PLANTATION
- EDIBLE OIL EXTRACTION
- POWDERING OF SPICES & OTHER CROPS
- EXTRACTION OF PULP & JUICES FROM HORTICULTURAL CROPS
- IRRIGATION
- BRICK KILN
- COLD STORAGE/BULK MILK CHILLER
- RICE MILL, FLOUR MILL ETC.

## UNIQUENESS

- BATTERY LESS OPERATION
- 3 PHASE & 1 PHASE COMBINED IN UNIT
- POWER DOMESTIC LOAD LIKE BULB, FAN, 1 TON INVERTER A.C, MOBILE CHARGER, COOLER, COMPUTER, LAPTOP, REFRIGERATOR, T.V, INDUCTION PLAT ETC.



TAG SOLAR SYSTEM

USPC Technology by KISAN SOLAR



U&SPC Controller Technical Datasheet									
		3HP U&SPC		5HP U&SPC		7.5HP U&SPC		10HP U&SPC	
		3HP USPC	1.6kVA 1 Phase	5HP USPC	2.6kVA 1 Phase	7.5HP USPC	3.3kVA 1 Phase	10HP USPC	5kVA 1 Phase
<b>PV Input</b>									
Min. Input Voltage	[Voc]	200		200		420		550	
Max. Input Voltage	[Voc]	350		450		650		850	
Max. Input Current	[A]	14		14		16		16	
<b>No of Input channels</b>		<b>1</b>		<b>1</b>		<b>1</b>		<b>1</b>	
<b>Output</b>									
Phase		3 Phase	1 Phase	3 Phase	1 Phase	3 Phase	1 Phase	3 Phase	1 Phase
Voltage	[AC]	160-400V	230V	220-400V	230V	230-400V	230V	290-415V	230V
Frequency	[Hz]	50-165Hz (50Hz for Single Phase)							
Maximum Current	[A]	12	12	14	14	15	15	18	19
Protection		Short Circuit, Open Circuit, Dry Run, Low Power, Over Load							
<b>Display &amp; Communication</b>									
Display Type		16 x 2 LCD							
Status Indicator		ON, OFF, Fault with appropriate Massage							
Remote Monitoring		IN BUILT GSM/GPRS							
<b>Other Info</b>									
IP Degree of protection		Electronics IP65							
Weight	[kg]	22				24			
Size (H)	mm	400							
Size (W)	mm	360							
Size (D)	mm	230							

**World's ONLY Technology, Made in India**

USPC Installation Requirements				
	3 HP U&SPC with 1.6kVA Single Phase	5 HP U&SPC with 2.6kVA Single Phase	7.5 HP U&SPC with 3.5kVA Single Phase	10 HP U&SPC with 5kVA Single Phase
<b>Panels Needed</b>	500W x 6(3000W)	500Wx10(5000W)	540Wx13( 6700W)	540W x 17(9000W)
<b>Structure for Panels</b>	Passive Structure	Passive Structure	Passive Structure	Passive Structure
<b>Motor-Pump</b>	3 HP- 100 Mtr. Head	5 HP- 160 Mtr. Head	7.5 HP- 180 Mtr. Head	10 HP- 220 Mtr. Head
<b>DC Wire</b>	As per Requirement	As per Requirement	As per Requirement	As per Requirement
<b>AC Wire</b>	As per Motor-Pump Head	As per Motor-Pump Head	As per Motor-Pump Head	As per Motor-Pump Head
<b>HDPE Pipe</b>	As per Motor-Pump Head	As per Motor-Pump Head	As per Motor-Pump Head	As per Motor-Pump Head
<b>MC4 Connectors</b>	As per Requirement	As per Requirement	As per Requirement	As per Requirement
<b>Earthing Kit</b>	As per Requirement	As per Requirement	As per Requirement	As per Requirement
<b>Other Accessories</b>	As per Requirement	As per Requirement	As per Requirement	As per Requirement

**Note:-**

- \* Motor-Pump Head can be Less or More as per the Ground Water Level
- \* Size of AC Wire & HDPE Pipe will vary according to the Motor-Pump Head



## 3 HP USPC



### KEY FEATURES

- Beneficiary can run all 3 Phase Applications of farm upto 3 HP.
- 1.5 KW Single Phase output available for Domestic use.
- Get real time electricity without any Battery/Inverter.
- All Protection measures taken for Customer's Safety.
- Switch On/Off facility is available through mobile.

3 HP USPC	
UNITS GENERATION	TOTAL UNITS
PER DAY	15
PER MONTH	15X30=450
PER YEAR	450X12=5400
FOR 25 YEARS	5400X25=135000
wood/ Diesel / kerosen / coal are other expenses that consumer is saving on above the electricity cost, because of the amount of power generation which is sufficient for entire house hold load.	



## 5 HP USPC



### KEY FEATURES

- Beneficiary can run 3 Phase Applications Such as Water Pumping System, Aata Chakki, Chaff Cutter, etc.
- 2.6 KW Single Phase output available for Domestic use.
- 40% more water than any other solar controller.
- All Protection measures taken for 3 Phase & Single Phase output.
- Switch On/Off facility is available through mobile.

5 HP USPC	
UNITS GENERATION	TOTAL UNITS
PER DAY	22.5
PER MONTH	22.5X30=675
PER YEAR	675X12=8100
FOR 25 YEARS	8100X25=2,02,500
wood/ Diesel / kerosen / coal are other expenses that consumer is saving on above the electricity cost, because of the amount of power generation which is sufficient for entire house hold load.	



## 7.5 HP USPC



### KEY FEATURES

- Beneficiary can run 3 Phase Applications Such as Water Pumping System, Bulk Milk Chiller, etc.
- 3.5 KW Single Phase output available for Domestic use.
- Get real time electricity without any Battery/Inverter.
- Early in the morning till Late in the evening-Make your own Electricity.
- Switch On/Off facility is available through mobile.

7.5 HP USPC	
UNITS GENERATION	TOTAL UNITS
PER DAY	37.5
PER MONTH	37.5X30=1125
PER YEAR	1125X12=13,500
FOR 25 YEARS	13,500X25=3,37,500
wood/ Diesel / kerosen / coal are other expenses that consumer is saving on above the electricity cost, because of the amount of power generation which is sufficient for entire house hold load.	



## 10 HP USPC



### KEY FEATURES

- Beneficiary can run 3 Phase Applications Such as Water Pumping System, Brick Kiln, Thresher, Oil Press Machinery, etc.
- 5 KW Single Phase output available for Domestic use.
- Beneficiary can run Industrial Machinery such as Rice Mill, Flour Mill, etc. upto 10 HP.
- All Protection measures taken for 3 Phase & Single Phase output.
- Switch On/Off facility is available through mobile.

10 HP USPC	
UNITS GENERATION	TOTAL UNITS
PER DAY	50
PER MONTH	50X30=1500
PER YEAR	1500X12=18000
FOR 25 YEARS	18,000X25=4,50,000
wood/ Diesel / kerosen / coal are other expenses that consumer is saving on above the electricity cost, because of the amount of power generation which is sufficient for entire house hold load.	



## PRODUCTIVITY OF USPC



HP	Chaff Cutter	Aata Chakki	Cold Storage	Thresher	Water Discharge
3	8-9 Qnt/hr.	40-50 Kg/hr.	30-40 Ltr./0-4 degree	200 Kg/hr.	86,000 Ltr./day
5	10-12 Qnt/hr.	60-70 Kg/hr.	50-100 Ltr./0-4 degree	300 Kg/hr.	1,09,200 Ltr./day
7.5	15-18 Qnt/hr.	90-100 Kg/hr.	200-300 Ltr./0-4 degree	450-550 Kg/hr.	1,35,000 Ltr./day
10	18-22 Qnt/hr.	110-120 Kg/hr.	500 Ltr./0-4 degree	550-650 Kg/hr.	1,80,000 Ltr./day



**THANK YOU**

