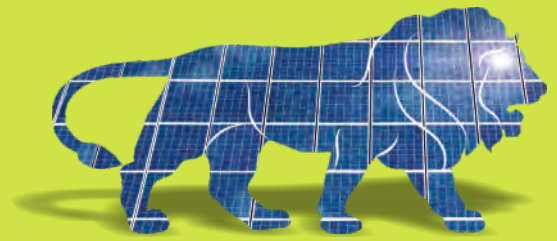


SU-Kam
Ek nayi soch

**Ecofriendly power solution
for sustainable future**





Make in India

Company Overview

Su-Kam was founded in 1998 by Mr. Kunwer Sachdev, a first generation entrepreneur, who has led the company in becoming a leading Indian brand and a successful example of 'Make in India'.

Headquartered in Gurgaon, and with 6 state-of-the art manufacturing facilities, Su-Kam leads the market with innovative products and a large sales and service network.

Su-Kam is the only power solutions company to be recognized for its R&D by the Department of Science and Technology, Government of India. The company is credited with filing the highest number of patents in the industry.

Su-Kam has received several prestigious awards like India's Most Trusted Brand in its category for 2015, Solar Energy Leader Award 2014, National Award for Quality Product from Government of India, etc.

Su-Kam has executed several large scale commercial and industrial solar projects, thereby providing cost effective and green energy solutions. Su-Kam is one of the leading players in solar energy in India and has a wide range of highly efficient and value for money products for household use.



CRISIL-MNRE Grade SP1A
Certificate - 2015

Awards and Accolades



INC. India Innovative 100 Award - 2013

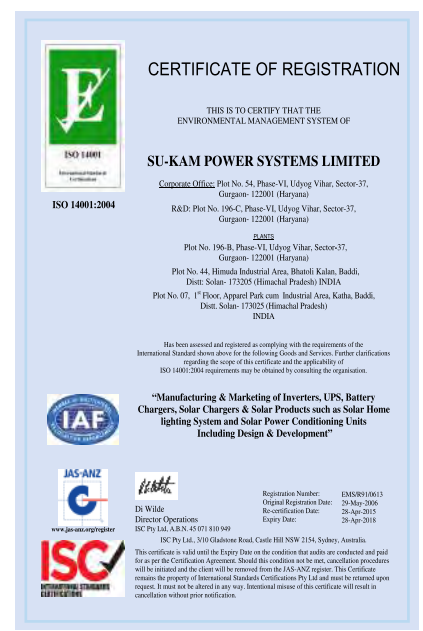
Solar Energy Leaders Award - 2014

Global Achievers Award for Business Leadership - 2014

Asia's Most Promising Brand - 2013

Most Trusted Brand in India - 2015

Quality Excellence Award for most innovative company - 2014



**Certificate of TÜV IEC EN 61215-205
6th August - 2015**

**Certificate of TÜV IEC EN 61730-1-2007
6th August - 2015**

**ISO Certification
ISO 14001-2004 & ISO 9001-2008**



Su-Kam has maximum number of patents in India, as many as 75 Technology Patents & 83 Design Patents

A Glimpse Of Su-Kam's Solar Projects



UPNEDA

250 KWp Mini Grid Solar Power Plant for UPNEDA, Kannauj, U.P.



Solar 100 KWp Installation for the Assam State Electricity Board, Assam



100 KWp Rooftop Solar Power Plant in SBI Academy, Gurgaon



250 KWp Solar Power Plants at DMRC Stations, Gurgaon



1MW Power India's Largest Grid Connected Rooftop Solar Plant on an Educational Institute - Punjab Engineering College, Chandigarh



150 KWp Powering ITM University in Gurgaon with Solar Power



Su-Kam facts

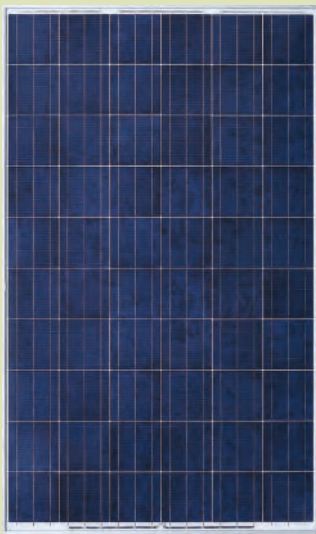
Su-Kam has 181 Copyrights and 169 Trademarks which is highest in India by any standard

Su-Kam builds the perfect modules: for single-family households, farms, schools, industrial use and solar power plants. The company builds modules that optimally adapt to the living and sun conditions in your region

New Product Introduction

Poly Crystalline Modules

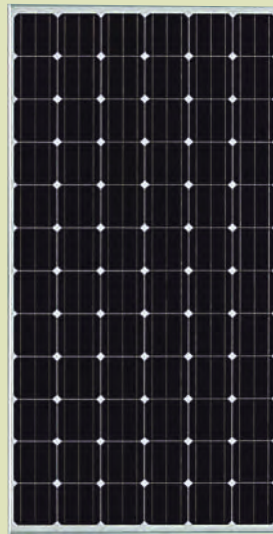
High performance, small frames and perfect for small roofs to Megawatt size power plants.



**Poly Crystalline
250Wp / 12V**

Mono Crystalline Modules

Universal and versatile use for every roof



**Mono Crystalline
320Wp / 24V**

Black Pearl Series

High performance and large format, ideal for large surfaces



**Pearl 250Wp / 24V
with Black Frame**

**25
YEARS**
Linear
Warranty

Industry leading linear warranty

With Su-Kam's linear warranty you receive one of the best warranties in the industry. In the first year 97%, thereafter, for the second year to the twenty-fifth year a maximum decrease of the module's nominal power output of 0.75% per year. Thereby one ends with 80% nominal power guaranteed in the 25th year after the defined warranty starting date.

**5
YEARS**
Product
Warranty

5-year product warranty

Su-Kam relies on certified quality in minute detail. For this reason, we can give a warranty of 5 years on the stability of all components.



Su-Kam modules are all perfectly set not only for sunny days, but also effective for snow days, cloudy days, foggy days, and stormy days – This enables you to optimally utilize them for clean energy.

Su-Kam has efficient modules which can produce more energy from the same or even lower sunlight



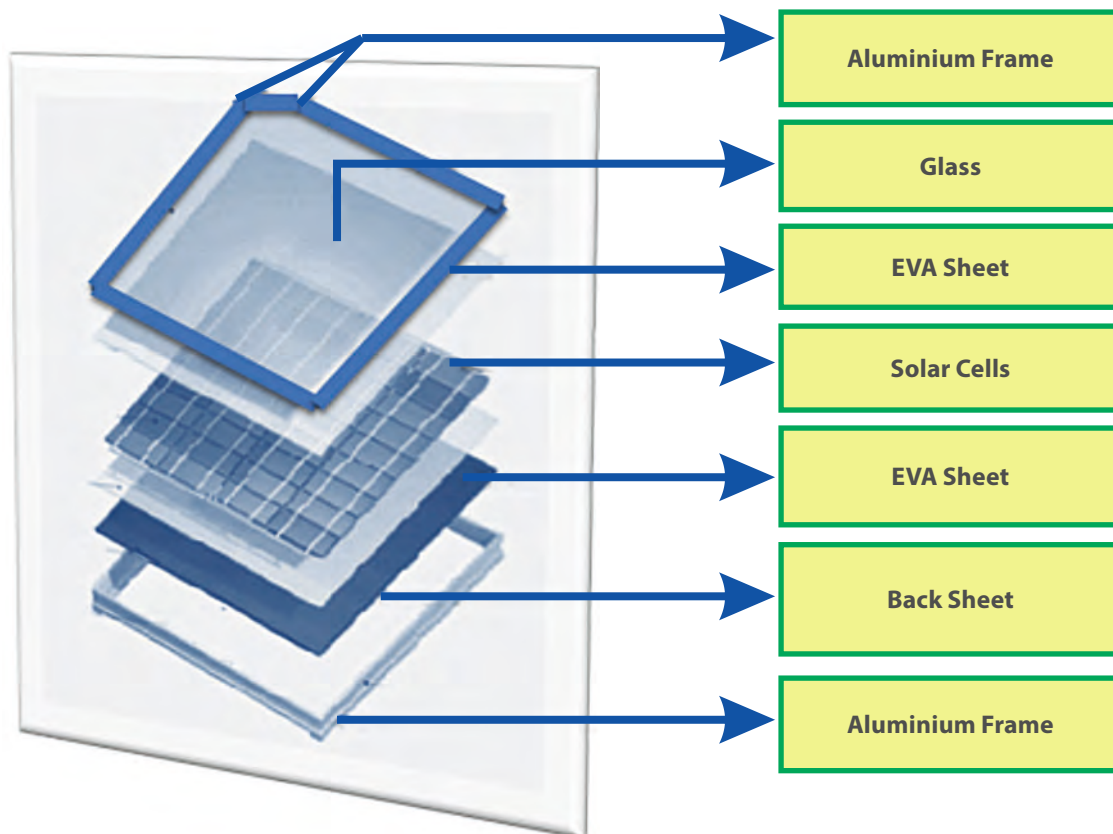
These components ensure that our modules are reliable and efficient:

Rigid frame: a hollow chamber profile ensures rigidity and high performance

State-of-the-art solar glass: anti-glare and self-cleaning for maximum output and low maintenance effort

High-tech material EVA: highly transparent to provide an extremely stable connection of components

Solid back sheet: high level of UVA resistance – a solid basis delivers solid output



Su-Kam facts

Su-Kam has an employee strength of 2800+ to deliver to utmost capacity



Excellent module efficiencies

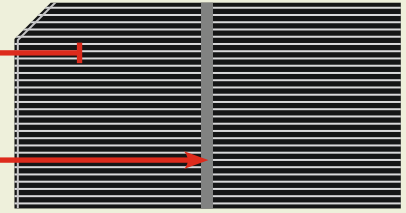


Roofs often have limited space for solar systems. The higher the solar module's efficiency, the better the surface efficiency of the entire system. Our solar modules offer above-average efficiencies.

Su-Kam's innovative cell design

Finer power lines: higher cell efficiencies for more yield through less shading effects

Usage of ultra-modern silver paste:



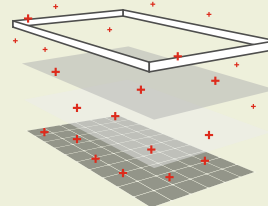
PID Resistant



Improved cell design and production process ensure the power output performance under harsh environment. High volume resistant EVA could limit the movement of the sodium ions from the cell surface to glass.

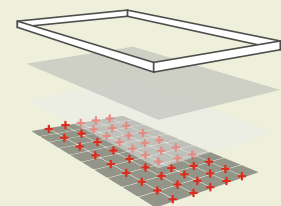
PID Resistant

Industry Standard



Low resistance: more energy gets lost

Su-Kam



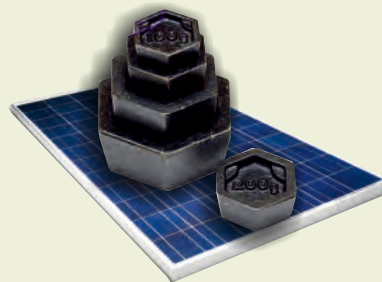
High resistance: no energy gets lost

Resistant against wind and snow

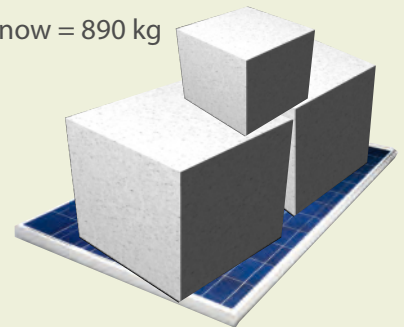


The rigid hollow chamber profile frame ensures high rigidity of the Su-Kam modules. They withstand snow loads of up to 550 kg/m² and wind speeds of up to 190km/h – clearly exceeding the provisions of IEC.

Load test: 2.5 m



Wet Snow = 890 kg



Tested for toughest environmental conditions



Particularly in agricultural holdings, modules are subject to high loads of ammonia. Therefore, Su-Kam equips the modules with a highly resistant back sheet. Tested and approved by TÜV Rheinland (German Technical Inspection Association) and VDE.



Su-Kam has 100+ Service Centers and 1000+ Service personnel to provide efficient and top of the line servicing.

Su-Kam Advantages

Su-Kam has a wide Service Network around the world as well as in India



Solar PV Panels are a wise investment, have a degradation rate of less than 0.75% per year, which is lower than other solar panels



Top most layer of Panels are manufactured with toughened glass to increase its life, besides being easy to maintain and clean



Our experienced engineers ensure that all panels are installed with 100% accuracy for maximum performance year after year



QUALITY ASSURANCE

- ✓ 100% inspection by EL tester
- ✓ Excellent low light performance
- ✓ 100% inspection by sun simulator
- ✓ Modules can perform under extreme environmental conditions
- ✓ Rigorous quality control standards



TECHNICAL SPECIFICATIONS

Capacity (Wp)	10	20	40	50	51	75	80	100	120	125	130	150	150	160	200	230	235	240	250	250	300
Module Volts (V)	12	12	12	12	12	12	12	12	12	12	12	24	24	24	24	24	24	24	24	24	24
Module Size																					
Width - W(mm)	280	350	665	665	665	666	666	666	666	666	666	666	666	666	982	982	982	982	982	982	982
Height - H(mm)	335	475	435	555	555	796	796	1006	1151	1151	1306	1483	1483	1483	1382	1639	1639	1639	1639	1639	1639
Thickness - T(mm)	25	25	25	25	25	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	40
Module Weight (kg)	1.40	2.00	3.10	3.96	3.96	6.00	6.00	7.50	8.50	8.50	9.60	11.20	11.20	11.20	14.70	17.30	17.30	17.30	17.30	17.30	21.80
Cell in Series	36	36	36	36	36	36	36	36	36	36	36	36	36	36	72	60	60	60	60	72	72
Round Mounting Hole Dimension (mm)	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
Mounting Hole (X-Axis) (mm)	244	314	629	629	629	630	630	630	630	630	630	630	630	630	946	946	946	946	946	946	936
Mounting Hole (Y-Axis) (Distance b/w 2 holes)(mm)	230	237.5	217.5	277.5	277.5	398	398	503	575.5	575.5	653	741.5	741.5	741.5	691	819.5	819.5	819.5	819.5	819.5	983
Electrical Parameters																					
Voc (V)	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	43.2	21.4	44.14	36.40	36.58	36.72	37.20	44.66	22.30
Isc (A)	0.63	1.25	2.5	3.1	3.15	4.6	4.85	6.3	7.2	7.6	7.9	8.95	4.65	9.45	5.96	8.25	8.4	8.51	8.75	7.24	14.2
PMax (W)	10	20	40	50	51	75	80	100	120	125	130	150	150	160	200	230	235	240	250	250	300
Vpm (V)	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	34.1	17.7	35.4	29	29.2	29.5	29.95	35.96	18.1
Ipm (A)	0.57	1.15	2.3	2.85	2.89	4.25	4.55	5.7	6.8	7.1	7.36	8.5	4.4	9.05	5.65	7.95	8.05	8.15	8.35	6.96	13.82
Eff.(%)	10.66	12.03	13.83	13.55	13.82	14.15	15.09	14.93	15.65	16.31	14.95	15.19	15.19	16.20	14.74	14.29	14.60	14.91	15.53	15.53	15.53
Tolerance (±mm)	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5	±5
Verify the Bill of Material	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Electrical Tolerance (± %)	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
RF ID	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

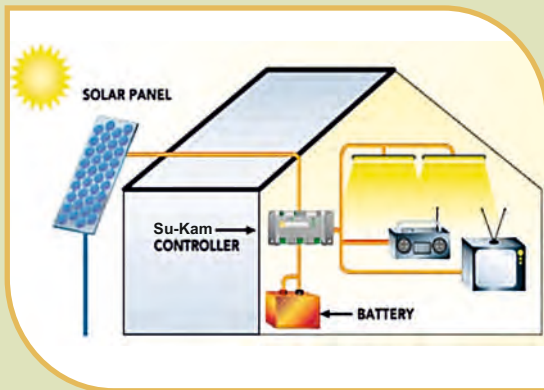
* These specifications are Copyright of Su-Kam

Note:

- The above specifications pertain to the standard SPV Modules. We can also supply SPV Modules of different ratings to meet specific technical requirements.
- Electrical specifications mentioned above are under standard test conditions as follows [a] light spectrum of AM 1.5 [b] an irradiation of 1,000 Watts per square meter and [c] a cell temperature of 25 degrees Centigrade. Normal production tolerance of +/-3%
- Due to continuous process innovations, the modules supplied may differ from those specified above.



APPLICATION AREAS



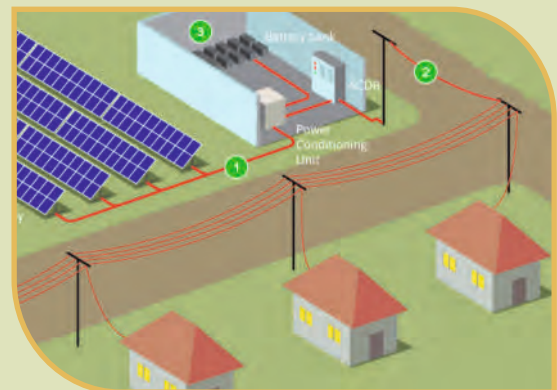
Domestic lighting systems



Pumping Borewell Water

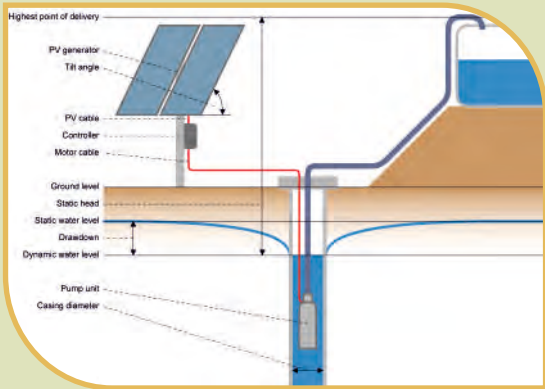


Crop Sprayer



Power pack for village electrification

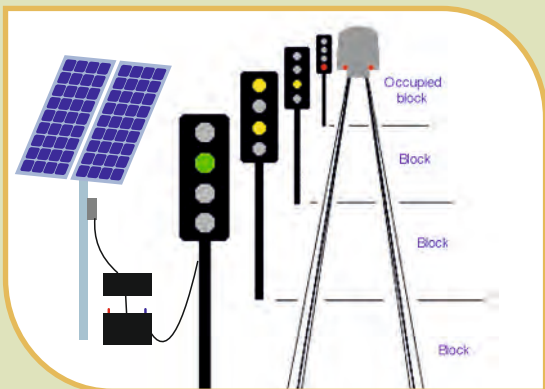




Water Pumping



Petrol Pump



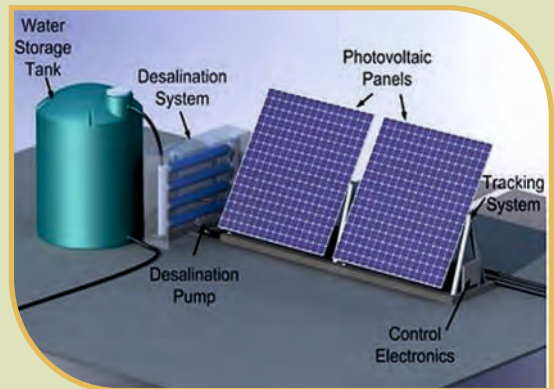
Railway Signaling And Lighting Systems



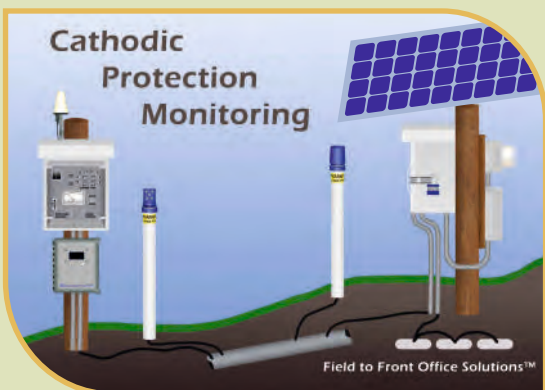
Rural Radio Phones And Exchanges



Offshore Platforms



Desalination Plants

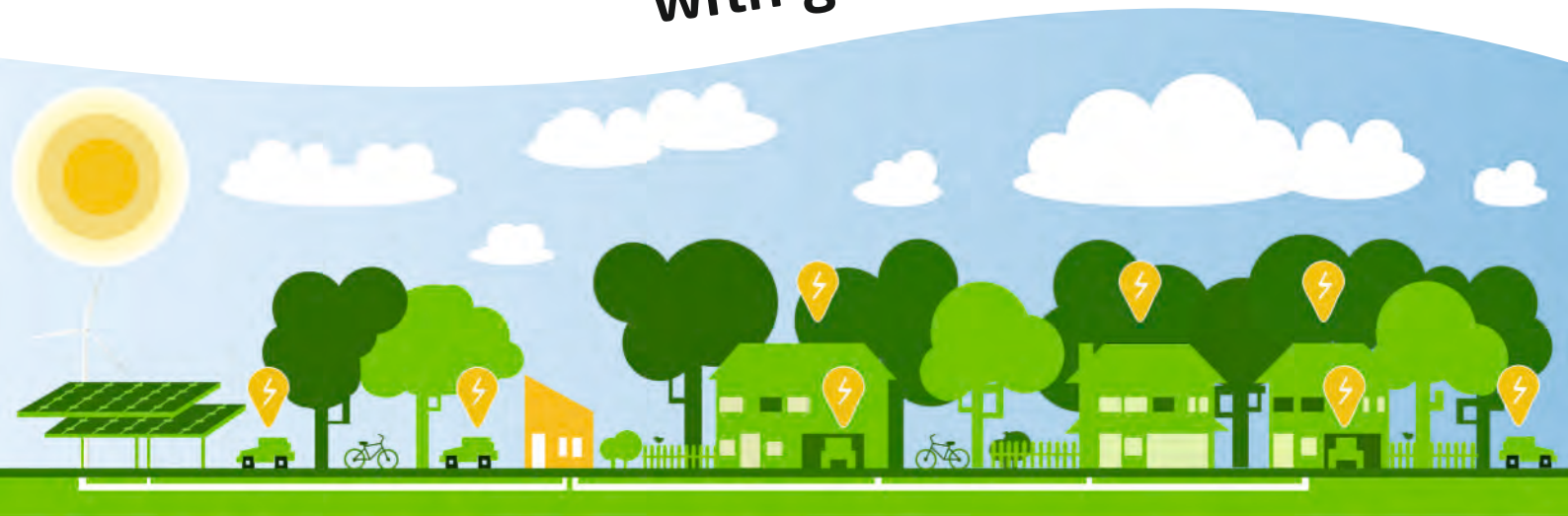


Cathodic Protection Systems



Sign Boards & Glow Signs

Committed to a cleaner environment
with green technology



Su-Kam
Ek nayi soch

Su-Kam Power Systems Ltd.

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