info@rkil.co.in | www.rkil.co.in | +91 9030322999

RO INDUSTRIES

MAKE IN INDIA

ISO 9001:2008 COMPANY

MNRE APPROVED

MSME

Ministry of MSME, Govt. of India

LM-80

PRODUCT CATALOGUE

info@rkil.co.in | www.rkil.co.in | +91 9030322999

Company Profile

ABOUT US:

The largest Solar & AC lighting products manufacturer in India, headquarters in Hyderabad, India. It has carved a niche for itself in a short span of time. We bring Electrical & Electronic solutions to a breadth of market, including industrial, consumer and rural development solar & AC Lighting products & projects. RK Industries has an extensive product offering which includes Solar ON & OFF Grid, Water Pumps, Water Heaters, Light, Street Light, Flood Light and more. A major company in Solar & AC lighting industry, continues optimizing sales and service team.

We provide specialized services and expertise across the product life cycle. We provide extraordinary value to customers and suppliers and connects them through the company's industry leading services.

VISION:

With our vision of being the 'Best in the Industry' and set a benchmark, we inculcate teamwork, integrity, professionalism and efficient. Values of vision has always been to be the leader in the industry and a consumer's choice. Our core business strategy has sustainability embedded into it right from the beginning.

OUR MISSION:

We want to enhance the bonding with the patrons with unmatched services, availability of huge range of products, servicing at competitive price. Our main mission is to enhancing quality of life and bringing happiness with stability.

ACTION PRINCIPLES:

- Act with integrity
- Challenge and drive change
- Perform with speed and ability
- Be passionate and determined to success
- Continuously explore, develop, create and implement new technology, ideas and products.

TEAM:

We have dedicated team of engineers, technicians and quality controllers. We have a strong supply chain management. The customer service team provides solution to all the queries, be it technical or usage related. Customer satisfaction is our sole moto, hence we continuously upgrade ourselves as per the ever-changing and evolving scenario to remain ahead in the industry

CLIENTELE:

RK INDUSTRIES. has huge client base in all over India and overseas. Our sole of has inspired us to be a global leader and meet the needs of the client's customer satisfaction across the globe. ***RK INDUSTRIES.*** serves industrial and commercial patrons with the purpose same enthusiasm and spirit.

info@rkil.co.in | www.rkil.co.in | +91 9030322999

GRID-TIED Solar Power Systems

"It's time for human race to enter the solar system."

Grid-connected PV system also known as On Grid is an electricity generating solar PV system that is connected to the utility grid. This system consists of solar panels, one or several inverters, a power conditioning unit and grid connection equipment. They range from small residential and commercial rooftop systems to large scale solar plants.

Components:

- Solar Panels
- Invertor
- MS Galvanized Mounting Structure and Hardware
- Distribution Boards AC & DC
- Cables and Accessories

Advantages of Grid-Tied/ Net Metering:

- This system will reduce the power bill as it is possible to sell excess electricity exported to the local electricity supplier.
- Suitable for Residential or Commercial (Institutions, Hospitals, Industries, Homes etc.,)
- These are comparatively easier to install as they do not require a battery system.
- Grid inter connection of photovoltaic (PV) power generation systems has the advantage of effective utilization of generated power because there are no storage losses involved.

If a residential customer has a PV system on the home's rooftop, it may generate more electricity than the home uses during daylight hours. If the home is net-metered, the electricity meter will run backwards to provide a credit against what electricity is consumed at night or other periods where the home's electricity use exceeds the system's output. Customers are only billed for their "net" energy use.

info@rkil.co.in | www.rkil.co.in | +91 9030322999

Solar Off-Grid Systems

An off grid solar system also known as a standalone solar system, is a solar power generating unit that creates and stores its own electricity.

Components :

- Solar PV Modules
- Strucure to Mount the Modules
- Inverter / UPS /PCU
- Lead Acid / SMF Battery Bank
- Battery Stand/ Box
- Array Junction/Fuse/MCB
- Cables and Accessories

Advantages :

- Freedom from Power Cuts.
- It Saves Power Utility Bill.
- Easy to Operate, Less maintenance.
- Environment Friendly System.
- Can Use Where There is No Electricity.

info@rkil.co.in | www.rkil.co.in | +91 9030322999

Solar Water Pumping Systems

Solar pumps that are designed to be powered by solar energy are far more efficient than an equivalent AC powered pump. Systems available for pumping from Bore wells, shallow wells and ponds.

Range: DC Solar Pumps 1, 2Hp
AC Solar Pumps 3, 5, 7.5, 10Hp

Suitable for all Agriculture and Irrigation applications

Components:

Solar PV Modules

Structure to mount the PV modules

Variable Frequency Drive (VFD)

Array Junction/Fuse/MCB

2 way 4-Pole MCB

IP 65 Standard Protection Box

Cables and Accessories

Advantages:

Solar-powered water pumping systems take very little maintenance, can be used in agriculture and irrigation applications

Can be installed on an existing Pump

They have long life, usually 20 to 30 years and solar water pump systems run without fuel as long as the Sun is shining.

Auto starting and stopping of water flow

RO INDUSTRIES

info@rkil.co.in | www.rkil.co.in | +91 9030322999

Solar Street Lighting

"Looking to the SUN for renewable energy"

Solar streetlight absorbs the solar energy during the daytime, and it converts into electrical energy, which stores in the battery.

At the nighttime LED light will glow automatically and it uses power from battery.

Everyday this process keeps on repeating

Applications:

Roads, Streets,
Railway gates, Parks,
Boundary Walls, Hotels,
Hospitals, Remote & Inaccessible
Places and wherever dependable
lighting is desired.

Safety Features:

System is Completely Shock Proof Due to Low Voltage Short Circuit Protection.

Available in Models from 9W to 120W

- LED Luminarie
- SMF Battery
- Solar Panel
- Charge Controller
- GI Pole and Mounting Structure
- Battery Box and Accessories

Benefits :

Dusk down operation / Auto ON OFF
High Efficiency with LED
Easy to Install, Less space Required
Super LED with Long Life and Wide angle Light Emission
No Electric Connection Required
Battery backup for cloudy or rainy days

RO

info@rkil.co.in | www.rkil.co.in | +91 9030322999

SEMI INTEGRATED SOLAR LED STREET LIGHT

LED Light	Solar Panel	LED Light	Solar Panel	Driver Efficiency	Pole Height	LED Light	Solar Panel
12W	50W	30W	100W	>90%	5 Mtr	100W	400W
15W	60W	40W	160W	>90%	6 Mtr	120W	500W
18W	70W	50W	160W	>90%	7 Mtr		
24W	80W	60W	200W	>90%	8 Mtr		

Operating Mode: Dusk to Dawn

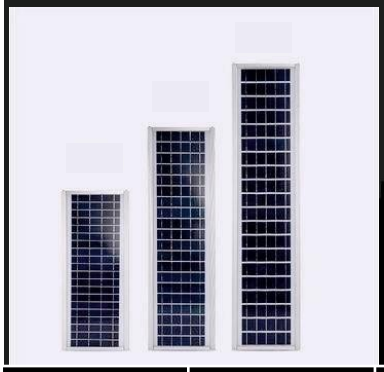
- 50% Dimming after 4 Hours
- Motion Sensor and customize dimming feature also available as per customer requirement

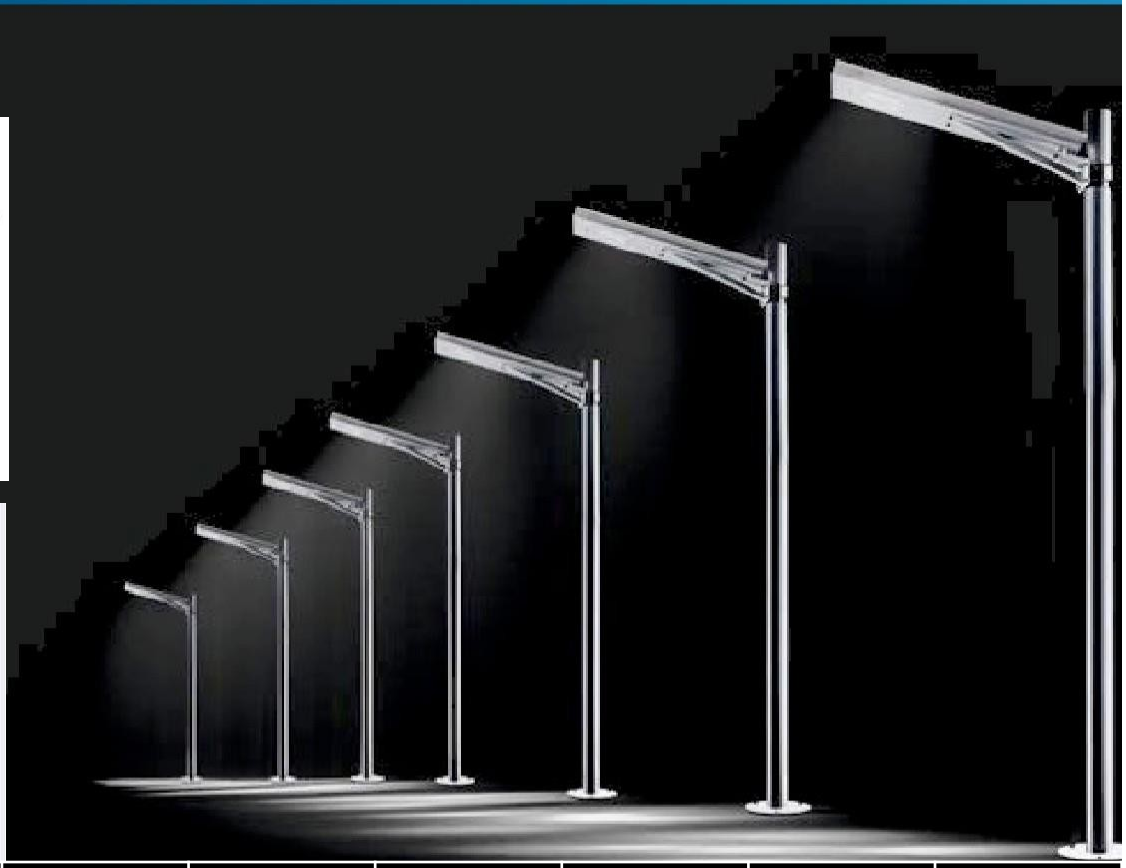
Product Warranty:

- 2 Years with Li-ion battery
- 5 Years with LIFePO4 battery

info@rkil.co.in | www.rkil.co.in | +91 9030322999

ALL IN ONE SOLAR STREET LIGHT





LED Light	Solar Panel	LED Light	Solar Panel	Driver Efficiency	Pole Height	LED Light	Solar Panel
12W	50W	30W	100W	>90%	5 Mtr	100W	400W
15W	60W	40W	160W	>90%	6 Mtr	120W	500W
18W	70W	50W	160W	>90%	7 Mtr		
24W	80W	60W	200W	>90%	8 Mtr		

Operating Mode: Dusk to Dawn
Mode: 50% Dimming
100 % brightness on PIR Detention (Motion Sensor) till 1 minute

Product Warranty:

- 2 Years with Li-ion battery
- 3 Years with LIFePO4 battery

info@rkil.co.in | www.rkil.co.in | +91 9030322999

Solar Electric Fencing

An electric fence is a barrier that uses electric shocks to deter animals or people from crossing a boundary. This system actively controls entry of animals, human beings by giving them a short, sharp but safe shock. Electric fence energizer produces a short, high DC voltage pulse at a regular rate and the shock is completely safe.

Components :

- Solar PV module & Structure
- Battery and Box
- Energizer with Voltage Alarm
- Strain Insulators , Wire tightners
- Lead out Cable and Joining Clamps
- Fence Posts , Wire & Accessories

Advantages :

- Non-Lethal Security system
- Easily constructed and maintained.
- Environment Friendly System.
- Ideal for compounds, farm houses and apartments
- Agriculture, Industrial and Forestry or Plantation sectors can use

info@rkil.co.in | www.rkil.co.in | +91 9030322999

SOLAR WATER HEATER

Solar water heating system is a device that helps in heating water by using the energy from the SUN. This energy is totally free. Solar energy (sun rays) is used for heating water. Water is easily heated to a temperature of 60-80 *C. Solar water heater of 100-500 litres capacity.

Main Components Of Solar Water Heating System:

- Solar Collector(to collect solar energy)
- Insulated tank (to store hot water)
- Supporting stand
- Connecting pipes and instrumentation etc.

Applications Of Solar Water Heater

Water heating is one of the most cost-effective uses of solar energy. Every year, several thousands of new solar water heaters are installed worldwide. Solar water heaters can be used for Homes, Community Centers, Hospitals, Nursing homes, Hotels, Restaurants, Dairy plants, Swimming Pools, Canteens, Ashrams, Hostels, Industry etc. Use of solar water heater can curtail electricity or fuel bills considerably.

info@rkil.co.in | www.rkil.co.in | +91 9030322999

HEAT PUMPS

Rk Industries introduces Heat Pump Water Heaters in India. Using renewable energy heat sources from the ambient air to heat water, these heaters can provide hot water round-the-clock and throughout the year in an energy-efficient and affordable way. Heat Pump Water Heaters are the right solution for domestic hot water applications.

HEAT PUMP Domestic

Get non-stop hot water anywhere in the house while saving as much as 75-80% on your heating costs. A solitary heat pump installed anywhere in the house can supply hot water to all the bathrooms and kitchens.

Applications:

House

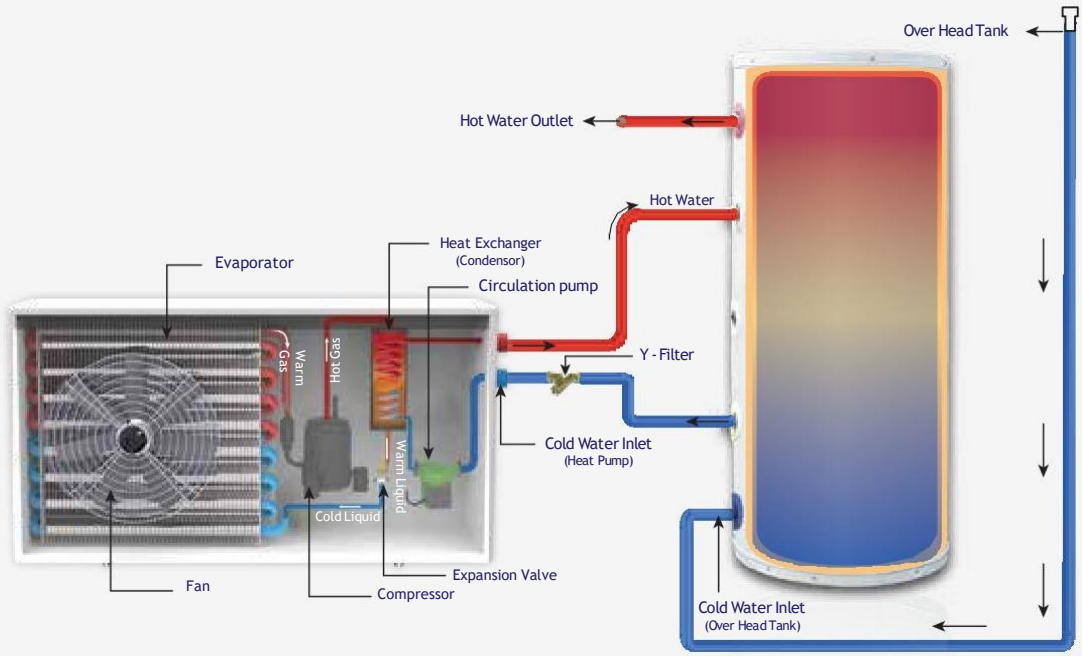
Individual Villas

Small Establishments

Heat pump water heaters are highly energy efficient as most of the energy for heating comes from the external environment, and only a fraction comes from electricity. Thus, for 1kW electricity consumed the heat transferred will be 4kW. The amount of electrical energy needed to heat water is greatly reduced compared to a conventional electric water heater in which, for 1kW electricity consumed the heat transferred is only 1kW. Thus, in heat pump water heaters the coefficient of performance (ratio of output power to input power) can be as high as 4.

info@rkil.co.in | www.rkil.co.in | +91 9030322999

HOW DOES A HEAT PUMP WORK



Major components of a heat pump water heater include a compressor, a refrigerant, two heat exchangers (a condenser and an evaporator) and an expansion valve.

- The operation begins with air being forced through an evaporator which contains a liquid refrigerant, with the help of a fan.
- This refrigerant evaporates to a gas and extracts heat from the ambient air.
- The warm gaseous refrigerant then passes through the compressor, which increases its pressure and it becomes a hot gas.
- This hot gas enters a heat exchanger (condenser) and transfers its heat to the water inside a storage tank.
- The refrigerant cools down in the condenser and becomes a warm liquid.
- It then passes through an expansion valve and becomes a cool liquid and enters the evaporator again.
- The cycle is then repeated in this manner.
- Thus, heat absorbed from the air is transferred to the water and the heating continues till the desired temperature is reached.

KEY FEATURES

- Split type system for flexible installation - external and internal units
- Water Circulation and Technology - Safe & Reliable no mixing of refrigerant and water
- Rugged and reliable rotary compressor
- High energy efficiency - COP of 4.2
- Intelligent automatic LCD controller to set temperature and time options
- Available with 100 liters 200 liters & 300 liters tank
- Enamel coated tank for water storage to withstand corrosion
- Utilizes as low as 0.83 / 1.19 / 1.79 kW input; delivers heat output up to 3.5 / 5.0 / 7.5 kW
- High rated pressure of 7 bar - designed to work with pressure pumps
- Can be combined with a circulation pump to deliver hot water within seconds anywhere in the house

COMPARISON OF VARIOUS HEATING SYSTEMS

Type	Weather Independent	On Demand	Water Volume	Eco-Friendly	Low operation cost
Heat Pump	✔	✔	High		
Solar Heater	✘	✘	Medium		
Gas Heater	✔	✘	Low	✘	
Electric Heater	✔	✘	High		

RO INDUSTRIES

info@rkil.co.in | www.rkil.co.in | +91 9030322999

MPPT & PWM SOLAR CHARGE CONTROLLERS

MPPT

- True verified MPPT algorithm (Incremental power tracking)
- 40% more panel supported than any other charge controllers
- Available with higher VDC models, upto 480 Volts (40 Batteries)
- Optional LCD display

PWM

- True PWM based PCU (CV CC Based Technique)
- CV CC charging makes it best PWM Solar PCU in Indian market
- Charging Stages to Increase Battery health by 70%
- SMU available in auto 12V/24V

MPPT Charge Controller		
SPV (VOC Max)	2.5KW - 30KW	
Battery	V	36 - 480
Charging Current	A	60

PWM Charge Controller		
Battery	V	12-24V
Charging Current	A	30

SMU		
Type	PWM	
VOC (Min-Max)	V	15 - 25 / 30 - 50
Battery	V	12/24V
Charging Current	A	50

RO

info@rkil.co.in | www.rkil.co.in | +91 9030322999

PWM SERIES PCU

- True PWM Based PCU (CV CC Based Technique)
- 40% more panel supported than any other PCUs
- CV CC Charging markes it best PWM Solar PCU in Indian market
- Big LCD display for Solar power and other parameters
- Less distortion in input and output Incorporated with Microchip and ST DSP engines
- Maximizes Solar use

PWM PCU							
Model	Unit	950/ 12V	1250/ 12V	1650/2 4V	2550/2 4V	3550/48V	5550/48V
Rating		850 VA	1000 VA	1500 VA	2000 VA	3000 VA	4000 VA
SPV Parameters							
Current (Max)		50					
VOC (Min-Max)	VOC	16-30	16-30	32-60	32-60	64-120	64-120
Max Power	W	650	800	1200	1600	2400	3200

RO INDUSTRIES

info@rkil.co.in | www.rkil.co.in | +91 9030322999

MPPT PCU

- True MPP Based PVU (Incrementa Power tracking)
- 40% Less panel requ red than othe PCUs RS-232 communication (Industria
- Standard MODBUS) fo remote monitoring
- Less d stortion in input and output Incorporated with Microchip and ST DSP engines
- Maximizes Solar usage through ntelligent modes.

MPPT P CU								
Parameter	UNITS	RATING						
System R ating	KVA		2	3	5	7.5	10	15
DC BUS	V	24	24	48	48 / 9 6	96 120	120 ./180	240
PHOTO VOLTAIC INP UT								
Voltage R ange (Min Max)	VOC	36-90	36-90	72-180	72-180 / 144 360	144-360 / 180 450	180-450 270 450	360 600
Max PVp ower	KW	1	2	3	5	7.5	10	15

info@rkil.co.in | www.rkil.co.in | +91 9030322999

LED FLOOD LIGHT

Model	Flood Light (W)	RATED VOLTAGE (V)	MAINS CURRENT (A)	System Lumens (lm)	Color Temp.
FL-30	30W	240	0.13	3900	6500K
FL-40	40W	240	0.175	5200	6500K
FL-50	50W	240	0.21	6500	6500K
FL-60	60W	240	0.25	7800	5700K
FL-80	80W	240	0.34	10400	5700K
FL-100	100W	240	0.42	13000	5700K
FL-120	120W	240	0.52	15600	5700K
FL-150	150W	240	0.64	19000	5700K
FL-180	180W	240	0.75	19800	5700K
FL-200	200W	240	0.85	22000	5700K
FL-240	240W	240	1.04	26400	5700K
FL-300	300W	240	1.27	33000	5700K

SPECIFICATIONS

Product Warranty 1 year

: High performance isolated driver constant current

: Die-cast aluminum housing

: Toughened Glass

info@rkil.co.in | www.rkil.co.in | +91 9030322999

SOLAR PANEL / SOLAR BATTERY

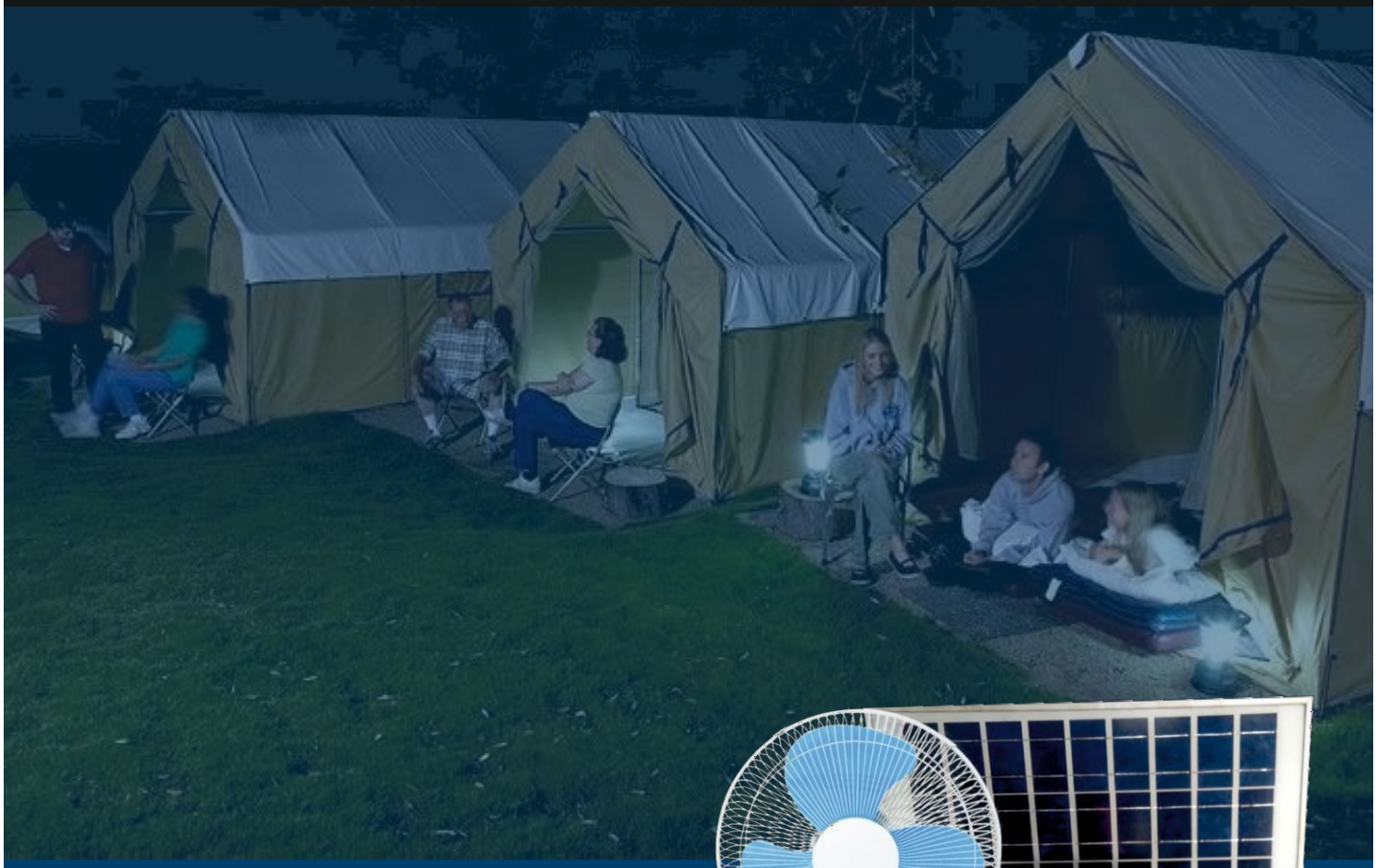
ENVIRONMENT FRIENDLY

SOLAR BATTERY

Solar Panel 3 Watts to 550 Watts
Monocrystalline Silicon / Polycrystalline
SOLAR BATTERY

info@rkil.co.in | www.rkil.co.in | +91 9030322999

SOLAR HOME LIGHT SYSTEM



SPECIFICATIONS

: Solar Panel 12V/20W with 5 Meter wire
: Battery SMF 12V/7.2Ah
: DC LED bulb 5W (2 Pcs. With 2 Meter wire)
: USB socket for mobile charging
: DC 12v output for DC fan
: System on LED indication
: Charging indication
: Low Battery indication
: Battery discharge and overcharge Protraction
: Battery backup 8-10 Hrs.

Product Warranty 2 year
Battery Warranty 1 year

info@rkil.co.in | www.rkil.co.in | +91 9030322999

LED LANTERN

SPECIFICATIONS

: High quality solar LED Lantern 3W, 5W, 10W
: With USB mobile charger
: 360-degree light
: 50000 Hrs. LED life
: Discharge and overcharge protection
: Rechargeable battery and can
also, be charged with solar panel or electric charger

Product Warranty 2 year

info@rkil.co.in | www.rkil.co.in | +91 9030322999

LED TABLE LAMP

SPECIFICATIONS

: Flexible design 1W, 3W, 5W, 10W
: Key dimming
: Long life battery Li-ion
: 50000 Hrs. LED life (6500K)
: Charging solar panel and electric charger

Product Warranty 2 year

info@rkil.co.in | www.rkil.co.in | +91 9030322999

OTHER PRODUCTS

Solar Insect Trap

Solar Spray

Solar Garden Light

RO INDUSTRIES®

Factory at 11-5-246/3D, H P Road, Moosapet, Hyderabad, Telangana-500018