



MG RAMA ENERGY (P) LTD.  
(Manufacturer of ETC Solar Water Heater & OEM Parts)



## INTRODUCTION

We, at MG Rama Energy (P) Ltd. are making little efforts to promote the usage the renewable source of energy to the society. Our goal is to protect nature by meeting the requirement of renewable source of energy equipments and by generating the awareness in the society to user the resource more and more.

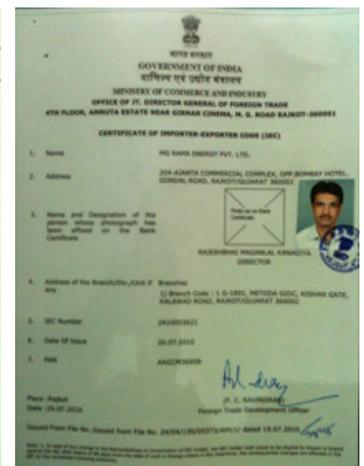
‘Solar Energy’ is an unlimited source of renewable energy. Solar Energy, if utilized, shall not only bridge the gap between demand and supply of traditional sources of energy but shall also save money since running cost of appliances working on solar energy is negligible shall also help in reducing pollution and maintenance of echo balance.

We are An ISO – 9001 & ISO – 14001 certified company. Also we are MNRE (Ministry of New and Renewable Energy) approved company. At present we are manufacturing various equipments which requires for assembly of ETC based Solar Water Heating System. We provide complete solution for ETC solar water heater manufacturing and OEM supply.

We are having our own manufacturing setup which is spread in the land of 21000 Sq. Feet in GIDC area of Rajkot city. The factory is well equipped with latest machinery which is able to produce finest quality products with a large volume. Our corporate office is located at the heart of the city very near to bus-stand thus it we made it very easy for our proposed customer to visit our office and to have a look to the product which is displayed at the place.

We, MG Rama Energy (P) Ltd. warmly welcome to visit us.

## CERTIFICATES



## PRODUCT RANGE

### SOLAR WATER HEATER



MG Rama Energy offers Evacuated Tube Based Solar Water Heating system for your hot water usage. There are two glass tubes which make single evacuated vacuum glass tube. The tubes are fused on one side and hermetically sealed with each other on the other side. The internal glass tube is coated with highly observing environmental friendly coating to trap the solar energy. The sunlight radiation falls on the glass tube passes

through external glass tube and absorbed by the multi layer coating on internal glass tube and converted into heat. This heats up the water contained in the inner glass tube. The heated water is lighter than the normal water thus it starts rising through the tube. The effect is called 'Thermosyphon' (natural circulation) effect which let the water eventually travel towards the top storage tank. Simultaneously cold water from the tank descends to the tube, gets heated in the absorber and rises back to the tank. The cycle keeps repeating. The water retains its heat for a long time as the hot water storage tank is insulated to prevent heat loss.

<b>Model</b>	100 LPD, 125 LPD, 150 LPD, 200 LPD, 250 LPD, 300 LPD, 500 LPD
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<b>Tank Specification</b>	
Inner Tank	Galvanize Iron, Thickness 2.5 mm With anti corrosion coating
Tank Cover	Galvanize Iron, Thickness 0.5 mm Polyester Coated
Stand Material	All Die Cut aesthetic stand M.S. Polyester Coated
Insulation	Polyurethane foaming CFC Free Thickness 50 mm
<b>Pressurized System</b>	
Model	iPR 200, iPR 300. iPR 500 liter per day
Inner Tank	Galvanize Iron, Thickness 2.5 mm With anti corrosion coating
Tank Cover	Galvanize Iron, Thickness 0.5 mm Polyester Coated
Pressure	Max. 3 kg/ cm
Usage	Banglow, Raw houses, Villas having hydro Pneumatic power water supply system
<b>Other Details</b>	
Type	Thermosyphon, Gravity Feed
Operating Pressure	Atmospheric
Electric Backup (optional)	2 Kw 220V AC, 4 Kw 220V AC with built in Thermostat
Temperature Rise	65°C ± 5°C on Standard Condition

## SOLAR STREET LIGHTS



**MG Rama** Solar street light system is designed for outdoor application in un-electrified remote areas. The system is an ideal application for illumination of streets, cross roads, forest and village lighting that are not connected with power grid. It is provided with battery storage backup sufficient to operate the light for 10-11 hours daily. Unlike LPS lamps that produce a yellow-orange light, Solar street light using LED technology generate a very powerful and targeted crisp white light of excellent quality, which significantly improves color rendition and night visibility.

### Solar Street light benefits

- Auto On/Off dusk to dawn operation.
- More than 2 days of autonomy.
- Good coverage, high brightness & long life-span.
- Totally green, No lead, No Mercury and No pollution Less Co<sup>2</sup> Emission
- Shock Proof, Ready to install, negligible maintenance.
- Weather proof luminaries.
- Stand Alone System
- No Electric Connection Required, No Electric Bill

<b>Technical Specifications:</b>	
Operating Voltage	12V DC
Required Power	14.4 Watts (For 12V LED)
Lamp Wattage	1 W High Power LED
Lamp Efficiency	> 80 %
Life Expectancy	> 50,000 Hrs.
Working Temperature	- 10 to 50O C
Solar Photovoltaic Module	12 V, 30 WP to 200 WP
LED Efficiency	110 Lumens per watt
<b>Charger controller</b>	
System Voltage	12 Volts
Charging Current	10 Amps
Protections	Against over charge & deep discharge, overload & Reverse polarity, current reverse flow
<b>Battery</b>	
Nominal Voltage	12 V DC
Battery Type	SMF (VRLA)
Charging Time	5 – 6 Hours on a clear sunny day

### Application:

- Streets, boulevards & Highways
- Military & Civil Security
- Parks & Parking Lots
- Airports, Docks, Transit lighting
- Villages



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