A SUN ZONE PRODUCT

Orange™ SOLAR

“BE SMART!!
SAY NO TO TRADITIONAL SOLAR WATER HEATER”

Bring home “Orange solar water heater” and get trouble free shower for lifetime...!

Decade of Solar harnessing

With a vast experience close to two decades, Sun Zone has carved a niche in the world of Solar Products. Starting as a small unit way back in **1997**, the company began to evolve under the able leadership of **Mr. Devendrappa S.T.** , who was a visionary who could foresee a bright future in the emerging renewable energy sector.

Dedication, hard work and commitment were a part of a continuous effort, we put into our venture and today, we stand tall as **SUN ZONE SYSTEM INDIA PRIVATE LIMITED.**

CONTENT

Cutting edge Technology

Sun Zone has state-of-art infrastructure and skilled manpower to design and build solar products with precise machines capable of cutting, bending, fitness testing, resistance to heat and assembling, along with use of pneumatic technology. Implementation of modren mechanization along with use of right practices has minimized wastage, speeded up production and has assisted in manufacturing solar products, both in terms of its quality and performance. Our every effort is rewarded when an end user is contented with our products and further recommends it to others.

— Steaming hot water from sun

For Domestic & Commercial use

We produce solar water heating systems built with superior quality raw materials and advanced technology, ensuring hot water availability based on capacity, location, and purpose of use.

We manufacture two types of Solar Water Heating Systems

Product Features

- Flat Plate collector with high coating for absorptivity
- Front glazing toughened glass
- TIG welded Stainless steel storage tank
- Diamond glass line Storage tanks
- Protection of storage tank from corrosion using Anode rode

Flat Plate Collector Type (FPC)

Ⓐ Non Pressurized
Ⓑ Pressurized
Ⓒ Thermo Siphonic Type
Ⓓ Heat Exchanger Type

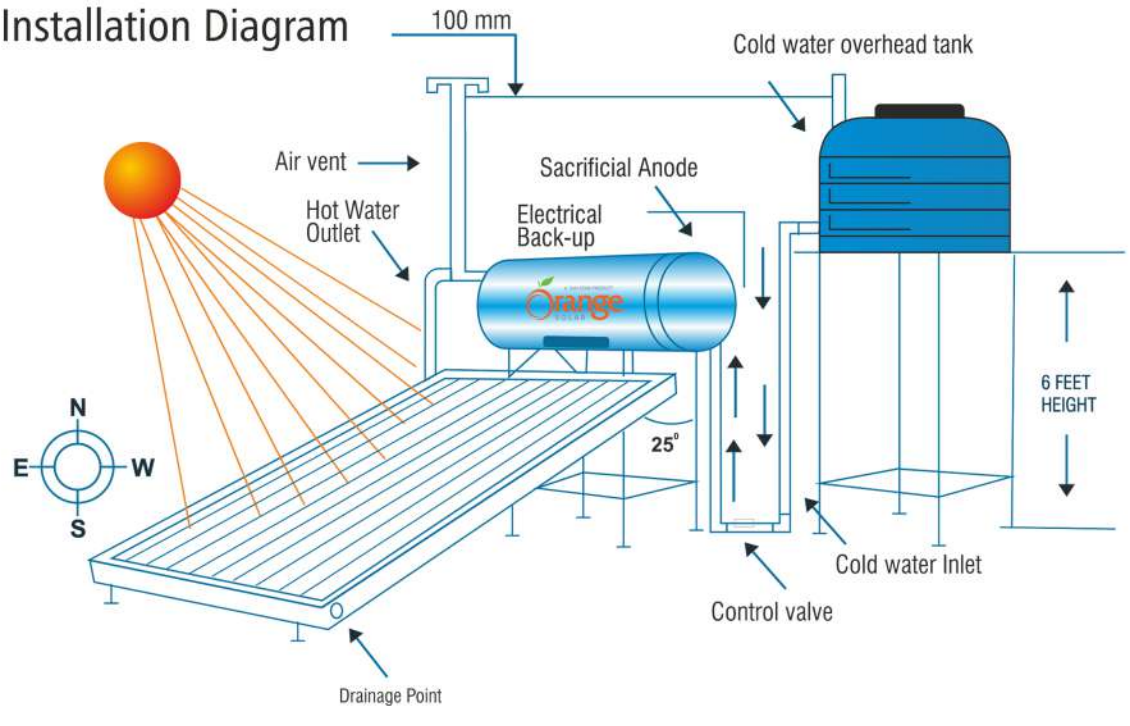
Evacuated Tube Collector System (ETC)

Ⓐ Diamond Glass Line Solar Water Heater
Ⓑ Prime Ceramic Solar Water Heater
Ⓒ Eco Deluxe Solar Water Heater
Ⓓ Mitra Solar Water Heater

Product Features

- High borosilicate twin glass tube of inner and outer assembly
- Inner glass tube coated with special selective three layer coating
- Fast thermal collection efficiency
- TIG / Seam / Plasma / Co2 / welded Stainless steel / Gl storage tank / ceramic coated tanks
- Protection of storage tank from corrosion using ceramic / pure epoxy coating

Installation Diagram



FPC

Non Pressurized Solar Water Heater

silent features

- Suitable for any type of hard water.
- International standard Diamond Glass line coating keeps the tank free from rust and corrosion.
- Coating material is glass, a good insulator of heat, ensuring water remains hot for a longer period.
- No rust possible, ensuring no particles stick, bond, or react with the inner tank surface.
- Suitable for water hardness up to 3000PPM.
- Special manhole provided for inner tank cleaning.
- High-density PUF (polyurethane foam) insulation.
- Provides hygienic and clean water for bathing purposes.
- Application:Softwater or Hardwater up to 50 to 3000PPM.
- Insulation:High density Poly Urethane Foam(PUF) Insulation inside the Tank to resist the hot water long period of 72 hrs.
- Outer Cladding Material:Pre Painted Galavanised Iron(PPGI)/ Stainless Steel(SS 430 Grade or SS 202 Grade).
- Hose pipe: 25/35 EPDM Rubber
- Electrical back-up: 2kw to 10kw thermostat controlled, varies according to size of the storage tank
- Sacrificial Anode: To avoid galvanic corrosion
- 1 years of Warranty.

Non Pressurized Solar Water Heater Specifications

Technical Specification of Solar FPC Collector

Absorber Coating	Selective coating of absorptivity 0.097 $^{+}_{-}$ 0.02
Riser Pipe	Copper 12.5mm
Header Pipe	Copper 25 mm
Bonding between Riser and Header	Brazing
Bonding between Riser and Absorber sheet	Continuous Ultrasonic Welding
Size of Collector	1030 mm x 2030 mm
Front Glazing	Hi Efficiency Frosted Glass toughened Glass 97%
Bottom sheet	Aluminium Sheet
Backside Insulation	Fiber wool / Rock wool
Gasket	EPDM Rubber
Collector Box	Extruded Aluminium channels
Header inlet and outlet jackets	Brass Flanges
Collector Box Corner finishing	Aluminium angle
Collector box coating	Polyester grade powder coating [Off White]
Assembly	Pneumatic Technology
Collector inside finishing	Aluminium foil

Available capacities in domestic 100,200,300 and 500 litres. For Non Domestic 500 litres to 10,000 litres.

Above 500 to any capacities for industrial applications(This systems can be manufactured according to the customized requirement where hot water requirement is more, such as Hotels, Hospitals, PG's, Hostels and Textile Intustries.,)

Technical Specification Supporting Structure

Material: Mild Steel with Polyster Grade Powder Coated.

Fastners SS 304/GI with Nickle platted.

FPC

Pressurized Solar Water Heater

Orange FPC Pressurised Solar Water Heaters are made from high-quality raw materials and high-quality components, meeting international standards. FPC collector absorbers are highly efficient with a 96.5% absorbency rate. The system can withstand pressures up to 8 kg/cm² and is tested up to 10 kg/cm², making it compatible with pressure booster pumps. Customers can easily use it for showers and high-pressure applications. The system is designed to be user-friendly under all conditions.

silent features

- Energy Efficient Generates hot water without electrical power, saving up to 90% on electricity bills.
- Advanced Technology Diamond glass line coating, one of the best technologies in the world.
- High Absorbency 96.5% absorbency rate.
- ISI Mark Made in India product.
- Suitable for water hardness up to 3000PPM.
- Tested Pressure 10 kg/cm² working pressure and 6 kg/cm².
- Durable Construction Outer cladding available in PPGI/SS.
- Sturdy Stands Made from high-thickness MS angle with powder coating.
- Robust Storage Tanks Made from 3mm to 8mm sheets.
- High-Density PUF Insulation Ensures effective thermal insulation.
- Variety of Capacities: Available from 100 litres to 10,000 litres.

Pressurized Solar Water Heater Specifications

Technical Specification of Solar FPC Collector	
Absorber Coating	Selective coating of absorptivity 0.097 ± 0.02
Riser Pipe	Copper 12.5mm
Header Pipe	Copper 25 mm
Bonding between Riser and Header	Brazing
Bonding between Riser and Absorber sheet	Continuous Ultrasonic Welding
Size of Collector	1030 mm x 2030 mm
Front Glazing	Hi Efficiency Frosted Glass toughened Glass 97%
Bottom sheet	Aluminium Sheet
Backside Insulation	Fiber wool / Rock wool
Gasket	EPDM Rubber
Collector Box	Extruded Aluminium channels
Header inlet and outlet jackets	Brass Flanges
Collector Box Corner finishing	Aluminium angle
Collector box coating	Polyester grade powder coating [Off White]
Assembly	Pneumatic Technology
Collector inside finishing	Aluminium foil
Working Pressure	4 Kg
Testing Pressure	6 Kg - 8 Kg

Available capacities in domestic 100,200,300 and 500 litres. For Non Domestic 500 litres to 10,000 litres.
Above 500 to any capacities for industrial applications(This systems can be manufactured according to the customized requirement where hot water requirement is more, such as Hotels, Hospitals, PG's, Hostels and Textile Intustries.,)

Technical Specification Supporting Structure

Material: Mild Steel with Polyster Grade Powder Coated.
Fastners SS 304/GI with Nickle platted.

ETC

Diamond Glass Line Solar Water Heater

silent features

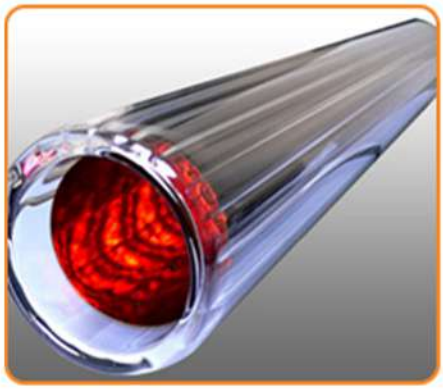
- Suitable for any type of hard water.
- International standard diamond line coating keeps the tank free from rust and corrosion.
- Coating material is glass, a good insulator of heat, ensuring water remains hot for a longer period.
- No rust possible, ensuring no particles stick, bond, or react with the inner tank surface.
- Suitable for water hardness up to 3000 PPM.
- Special manhole provided for inner tank cleaning.
- High-density PUF (polyurethane foam) insulation.
- Provides hygienic and clean water for bathing purposes.
- Application:Softwater or Hardwater up to 3000PPM.
- Insulation:High density Poly Urethane Foam(PUF) Insulation inside the Tank to resist the hot water long period of 72 hrs.
- Outer Cladding Material:Pre Painted Galavanised Iron(PPGI)/ Stainless Steel(SS 430 Grade or SS 202 Grade).
- 5 + 5 = 10 years of Warranty.

Diamond Glass Line Solar Water Heater Specifications

Technical Specification of Solar Storage Tank / System	
Storage Tank	Diamond Glass Line Enamel Grade CR Material with 1.6 mm thickness
Inner Tank Coating	Porcelain Glass Line Wen-Del make German
Insulation	High Density 50MM PUF insulation
Tank Outer Cladding	Polyester grade powder coated sheet /Stainless Steel with 0.35mm .
Inter Connecting Pipes	CR with Porcelain Glass Line
Storage Tank Stand	GI with Powder Coated 1.2 mm
Tilt Angle of the stand	26 Degree
Welding Technology	Co2 Automation Welding
Application	Soft Water/Hard Water
No of Tubes	One tube for 10 ltr (58x1800mm)/For 500 LPD one tube15 ltr(S8 x 2100mm)
Size of Tube	One tube for 10 ltr (58x1800mm)/For 500 LPD one tube15 ltr(S8 x 2100mm)
Diameter of the Inner and Outer Tank	360 mm Inner Tank 360 & 460 mm Outer Tank /450 & 550mm
Manhole Cap	Available
Type of Tube	For 500LPD one tube 15 ltr (58 x 2100mm)
Water Usage	Upto 3000 PPM
Warranty	5 Years

Three Target Evacuated Glass Tube Specification

Structure	All-glass double-tube coaxial structure
Glass Material	High Borosilicate 3.3 glass
External pipe diameter & thickness	058*MM+0.7mm=1.6mm
Internal pipe diameter & thickness	047*MM+0.7mm=1.6mm
Pipe length	1800mm/2100 mm
High borosilicate twin glass tube of inner and outer assembly.	
Inner glass tube coated with special selective three layer coating.	
Fast thermal collection efficiency.	



Absorptive Coating Property

Structure	CU/SS-ALN(H)/SS-ALN(L)/ALN
Sediment Method	3-target magnetron sputtering Plating
Specific Absorption	α = 0.93-0.96 (AM 1.5)
Emission Ratio	εn = 0.04-0.06 (80°C ± 5°C)
Vacuum Tightness	P < 5.0x10^-2 Pa
Idle Sunning Property Parameters	Y = 260-300 m²·°C/kW

Solar Irradiation for Obtaining a Present

Water Temperature	H < 4.7 MJ/m² (058) H+3.7-4.2 MJ/m²
Average Heat Loss Coefficient	U_t = 0.4-0.6 W/(m²°C)

Available capacities
110,160 210,230,270,330 and 510 litres.

ETC

Prime Ceramic Solar Water Heater

silent features

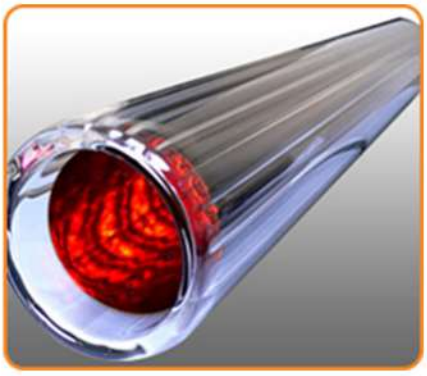
- Inner Tank Material is Cold Rolled Iron.
- Inter Connecting Nipples is CR.
- Special Manhole provision for inner tank cleaning (This can be used as heater coil provision).
- Automation Welding Technology used to produce Tanks.
- Coating Technology:Fusion bonding ceramic coating.
- Protection of storage tank from corrosion using fusion bonding ceramic coating.
- This model suits any hard water condition up to 1000PPM.
- Application:Softwater or Hardwater up to 1000PPM.
- Insulation:High density Poly Urethane Foam(PUF) Insulation inside the Tank to resist the hot water long period of 72 hrs.
- Outer Cladding Material:Pre Painted Galavanised Iron(PPGI)/ Stainless Steel(SS 430 Grade or SS 202 Grade).
- 5 years of Warranty.

Prime Ceramic Solar Water Heater Specifications

Technical Specification of Solar Storage Tank / System	
Storage Tank	CR material
Inner Tank Coating	Fusion Bond Ceramic.
Inner Tank Thickness	1.2 mm
Insulation	PUF
Tank Outer Cladding	Polyester grade powder coated sheet /Stainless Steel.
Inter Connecting Pipes	CR
Storage Tank Stand	GI with Powder Coated with 1.2mm thickness .
Welding Technology	Co2
Application	Soft Water/Hard Water upto 1000PPM
No of Tubes	One tube for 10 ltr (58x1800mm)/For 500 LPD one tube15 ltr(S8 x 2100mm)
Size of Tube	58 X 1800mm / 2100mm
Type of Tube	High Borosilicate 3 Target Coating (Alu/Cop/NIC).
Water Usage	Upto 1000 PPM
Warranty	5 Years

Three Target Evacuated Glass Tube Specification

Structure	All-glass double-tube coaxial structure
Glass Material	High Borosilicate 3.3 glass
External pipe diameter & thickness	058*MM+0.7mm=1.6mm
Internal pipe diameter & thickness	047*MM+0.7mm=1.6mm
Pipe length	1800mm/2100 mm
High borosilicate twin glass tube of inner and outer assembly.	
Inner glass tube coated with special selective three layer coating.	
Fast thermal collection efficiency.	



Absorptive Coating Property

Structure	CU/SS-ALN(H)/SS-ALN(L)/ALN
Sediment Method	3-target magnetron sputtering Plating
Specific Absorption	α = 0.93-0.96 (AM 1.5)
Emission Ratio	εn = 0.04-0.06 (80°C ± 5°C)
Vacuum Tightness	P < 5.0x10^-2 Pa
Idle Sunning Property Parameters	Y = 260-300 m²·°C/kW

Solar Irradiation for Obtaining a Present

Water Temperature	H < 4.7 MJ/m² (058) H+3.7-4.2 MJ/m²
Average Heat Loss Coefficient	U_t = 0.4-0.6 W/(m²°C)

Available capacities
100,150 200,250,300 and 500 litres.

ETC

Eco Deluxe Solar Water Heater

silent features

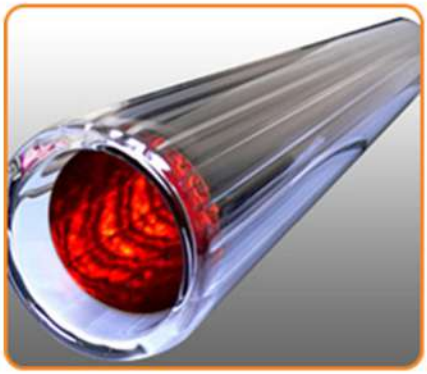
- Manufactured by using Inner Tank Material SS 304 L Grade.
- Non Welding Technology used to produce Inner Tanks.
- Inter Connecting pipes SS 304.
- **Application:** Softwater up to 200PPM.
- **Insulation:** High density Poly Urethane Foam(PUF) Insulation inside the Tank to resist the hot water long period of 72 hrs.
- **Outer Cladding Material:** Pre Painted Galavanised Iron(PPGI)/ Stainless Steel(SS 430 Grade or SS 202 Grade).
- 5 years of Warranty.

Eco Deluxe Solar Water Heater Specifications

Technical Specification of Solar Storage Tank / System	
Storage Tank	S S 304-L
Thickness	0.5mm shell and 0.6 mm Dish
System Type	Airvent
Insulation	PUF
Tank Outer Cladding	Stainless Steel 202 Grade
Inter Connecting Pipes	Stainless Steel 304 Grade.
Storage Tank Stand	GI Powder coted 1.2mm / SS 202 Grade with 1mm thickness
Welding Technology	Automatic Fusing for Nipples and for Inner Tank End Caps Non-welding
Application	Soft Water
No of Tubes	One tube for 10ltr
Size of Tube	58 X 1800mm / 2100
Type of Tube	One tube for 10 ltr (58x1800mm)
Water Usage	Upto 200 PPM
Warranty	5 Years

Three Target Evacuated Glass Tube Specification

Structure	All-glass double-tube coaxial structure
Glass Material	High Borosilicate 3.3 glass
External pipe diameter & thickness	058*MM+0.7mm=1.6mm
Internal pipe diameter & thickness	047*MM+0.7mm=1.6mm
Pipe length	1800mm/2100 mm
High borosilicate twin glass tube of inner and outer assembly.	
Inner glass tube coated with special selective three layer coating.	
Fast thermal collection efficiency.	



Absorptive Coating Property

Structure	CU/SS-ALN(H)/SS-ALN(L)/ALN
Sediment Method	3-target magnetron sputtering Plating
Specific Absorption	α = 0.93-0.96 (AM 1.5)
Emission Ratio	εn = 0.04-0.06 (80°C ± 5°C)
Vacuum Tightness	P < 5.0x10^-2 Pa
Idle Sunning Property Parameters	Y = 260-300 m²·°C/kW

Solar Irradiation for Obtaining a Present

Water Temperature	H < 4.7 MJ/m² (058) H+3.7-4.2 MJ/m²
Average Heat Loss Coefficient	U_t = 0.4-0.6 W/(m²°C)

Available capacities
100,150 200,250,300 and 500 litres.

ETC

Mithra
Solar Water Heater

silent features

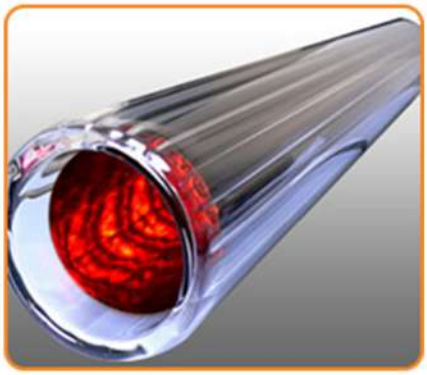
- Manufactured by using Inner Tank Material SS 304 L Grade.
- Non Welding Technology used to produce Inner Tanks.
- Inter Connecting pipes SS 304.
- **Application:** Softwater up to 200PPM.
- **Insulation:** High density Poly Urethane Foam(PUF) Insulation inside the Tank to resist the hot water long period of 72 hrs.
- **Outer Cladding Material:** Pre Painted Galavanised Iron(PPGI)/ Stainless Steel(SS 430 Grade or SS 202 Grade).
- 5 years of Warranty.

Mithra Solar
Water Heater Specifications

Technical Specification of Solar Storage Tank / System	
Storage Tank	S S 304-L
Thickness	0.5mm shell and 0.6 mm Dish
System Type	Airvent
Insulation	PUF
Tank Outer Cladding	PPGI / Stainless Steel 202 Grade
Inter Connecting Pipes	Stainless Steel 304 Grade.
Storage Tank Stand	GI Powder coted 1.2mm / SS 202 Grade with 1mm thickness
Welding Technology	Automatic Fusing for Nipples and for Inner Tank End Caps Non-welding
Application	Soft Water
No of Tubes	One tube for 10 ltr
Size of Tube	58 X 1800mm
Type of Tube	One tube for 10 ltr (58x1800mm)
Water Usage	Upto 200 PPM
Warranty	5 Years
Assistant Tank	6 Liter

Three Target Evacuated Glass Tube Specification

Structure	All-glass double-tube coaxial structure
Glass Material	High Borosilicate 3.3 glass
External pipe diameter & thickness	058*MM+0.7mm=1.6mm
Internal pipe diameter & thickness	047*MM+0.7mm=1.6mm
Pipe length	1800mm/2100 mm
High borosilicate twin glass tube of inner and outer assembly.	
Inner glass tube coated with special selective three layer coating.	
Fast thermal collection efficiency.	



Absorptive Coating Property

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Sediment Method	3-target magnetron sputtering Plating
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Solar Irradiation for Obtaining a Present

Water Temperature	H < 4.7 MJ/m² (058) H+3.7-4.2 MJ/m²
Average Heat Loss Coefficient	U_t = 0.4-0.6 W/(m²°C)

Available capacities
100,150, 200, 250, and 300 litres.

SOLAR
FLAT PLATE COLLECTOR

Absorber Coating	Selective coating of absorbivity 0.097 + 0.02
Riser Pipe	Copper 12.5mm
Header Pipe	Copper 25 mm
Bonding between Riser and Header	Brazing
Bonding between Riser and Absorber sheet	Continuous Ultrasonic Welding
Size of Collector	1030 mm x 2030 mm
Front Glazing	Hi Efficiency Frosted Glass
Bottom sheet	Aluminium Sheet
Backside Insulation	Fibre wool / Rock wool
Gasket	EPDM Rubber
Collector Box	Extruded Aluminium channels
Header inlet and outlet jackets	Brass Flanges
Collector Box Corner finishing	Aluminium angle
Collector box coating	Polyester grade powder coating [Off White]
Assembly	Pneumatic Technology
Collector inside finishing	Aluminium foil

A SUN ZONE PRODUCT

Orange SOLAR

Fact File - Which makes us the best

- Sun Zone has been in the market from past 27 years developing excellent products in Solar Water Heater and Solar Lighting System (Solar Photovoltaic) Heat Pump and in other renewable energy making us more competent and has facilitated our growth even in this phase of tough competition.

- Our solar products are the culmination of excellent engineering, use of advanced technology with high quality materials manufactured at state-of-art infrastructure, providing our customer with high degree of satisfaction for products and services.

- We come up with customized solutions and to provide efficient solar product and services. We understand your requirements, identify appropriate products and do the complete installation, as per the customers need.

- Our solar products have highly efficient electrical components and system, we observe competent methods of integration during installation. This increases the system efficiency resulting in better energy savings.

- Our efficient team of highly skilled manpower ensures timely installation and servicing of solar system adhering to the procedures of international standards.

- We provide longer warranty period for products. Our warranty period of one year gets extended to four more years on performance warranty against AMC.

- We have all major renewable energy products available under one roof. This facility helps our customer to choose and select the product according to their convenience.

- We are an ISO 9001-2008 certified company.

- We are certified by ISI (Bureau of Indian Standards) for Quality.

- We are MNRE (Ministry of New and Renewable Energy) approved company.

- We are GEM registered company.

- We manufacture our products under the National initiative of "Made in India".

SCAN FOR

OUR PROJECTS

"The only infinite power source that was free to use all day & every day it is solar power."

A SUN ZONE PRODUCT

Orange SOLAR

AN ISO 9001-2008 COMPANY

BROUGHT TO YOU BY

Regd. Off. & Works

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