#### **Purchase**

From:

"PurchaseRadiantsolar" <purchase@radiantsolarindia.com>

To: Cc: <gaurang@modiproperties.com>
<purchase@modiproperties.com>

Sent:

Saturday, September 18, 2010 1:12 PM

Attach:

019 - Modi Properties doc

Subject:

Quotation for Solar power pack system and Solar water heating system

Kind Attention: Sri GAURANG MODY - Director

Sri. Srinivasa Rao - Manager Purchase

Dear sir

Kindly look at our quotation(in attachment) for the supply of Solar power pack system and Solar water heating system as per your requirement.

Thanking you.,

VENKATESWARA RAO.G

RADIANT ENERGY TECHNOLOGIES 205, HANUMANTHA REDDY COMPLEX TADBUND CROSS ROADS, SECUNDERABAD-9

PH: 040 27892222 / 040 40196364

Mobile: 92465 88222

**CUSTOMER NAME:** 

M/S. MODI PROPERTIES & INVESTMENTS PVT LTD.,

5-4-187 / 3&4, II FLOOR, M.G.ROAD,

SECUNDERABAD - 500 003,

PH: 040 - 6633 5551,

E-MAIL: gaurang@modiproperties.com

SUJECT

QUOTATION FOR SOLAR WATER HEATING SYSTEM

PREPARED BY:

M/s. RADIANT ENERGY TECHNOLOGIES

205, HANUMANTHA REDDY COMPLEX TADBUND CROSS ROADS, HYDERABAD

PH: 040 27892222 / 040 40196364

Mobile: 92465 88222

E-MAIL: marketing@radiantsolarindia.com

Contact Person: Mr. Venkateswara Rao G

Cell: 92465 88222

**QUOTATION NO** 

RET/10-11/QUOT-019, Dt: 18-09-2010

## **ORGANISATION PROFILE:**

Our Organization name:

: M/s. Radiant Energy Technologies

Address with contact details: Flat No - 205, Hanumantha Reddy Complex

Tadbund Cross Roads, Tadbund,

Secunderabad - 500009, Andhrapradesh

Ph: 040 27892222 / 040 40196364

(0) 9246588222 / (0) 9246588685

E-mail:

marketing@radiantsolarindia.com

purchase@radiantsolarindia.com

Established in the year

: 2000

Registered with

: 1) MSME (Micro, Small, Medium Enterprises, Govt. of A.P

Wide document no. PART-II/MICRO/BI/3697/08

2) Non Conventional Energy Development of Andhra

- Pradesh (NEDCAP)

3) MNRE as manufacturer of Vacuum tube solar heater

Import Export License No

: IEC 0906013771

TIN No

: 28290135629

PAN No

: AAGFR4803E

CST No

: BGT / 09 /1 / 4004

### **CUSTOMER BASE**

Radiant Energy Technologies is having a widest range of customer database through out India, which includes Public sector, Private sector companies, domestic sector individuals, corporate people etc.

HONOURABLE CHIEF MINISTER OF A.P – SRI. K ROSAIAH DIRECTOR GENERAL OF POLICE – SRI. AK KHAN FILM ACTOR – PRABHAS CHAIRMAN – NAGARJUNA CONSTRUCTIONS CHAIRMAN – KARVY GROUP CHAIRMAN – ADITYA CONSTRUCTIONS

- 1) M/s. Bharat Scoutes & Guides of A.P Govt of INDIA
- 2) M/s. Andhra Pradesh Police Academy(APPA) -Govt of INDIA
- 3) M/s. Andhra Pradesh Police Housing Board Govt of INDIA
- 4) M/s. National Geo Physical Research Institute(NGRI) Govt of A.P
- M/s. Survey of India Govt of A.P.
- 6) M/s. Gas Authority of Inida Ltd (GAIL)- Visakhapatnam, A.P
- 7) M/s. Hindustan Petroleum Corporation Ltd (HPCL)
- 8) M/s. Nagarjuna Constructions Pvt Ltd Hyderabad
- 9) M/s. Karvy Consultants Pvt Ltd Hyderabad
- 10) M/s. Satyam Computer Services Ltd Hitech City, Hyderabad
- 11) M/s. HSBC (EDPI) Pvt Ltd Software city layout, Hitech city, Hyderabad
- 12) M/s. Honey well Technology Solutions Pvt Ltd Nanakrmguda,

Hyderabad and SEZ-Krishnarajapuram, Bangalore

- 32) M/s. Gamma Agrotech Pvt Ltd Pasamilavaram, Hyderabad
- 33) M/s. Global Energy Systems Ltd Hitech city, Hyderabad
- 34) M/s. Gujarathi Trust Bhavan Koti, Hyderabad
- 35) M/s. Gujarathi Pragati Bhavan Kachiguda, Hyderabad
- 36) M/s. Gajalakshmi Homes & Developers Tirupathi, AP
- 37) M/s. HBL Power Knife Ltd(HELA) Khushiaguda, Hyderabad
- 38) M/s. Hitech Constructions Pvt Ltd Manikonda-Hyderabad
- 39) M/s. Hetero Drtugs Pvt Ltd Gagilapur, Hyderabad
- 40) M/s. Infotrack systems Pvt Ltd Abids, Hyderabad
- 41) M/s. Inventaa Chemicals Ltd IDPL Colony, Hyderabad
- 42) M/s. Karvy Consultants Ltd Jubile Hills, Hyderabad
- 43) M/s. LRK Constructions Pvt Ltd mehdipatnam, Hyderabad.
- 44) M/s. Lahari Ventures Somajiguda, Hyderabad.
- 45) M/s. Met weigh India Ltd- Habsiguda, Hyderabad
- 46) M/s. Meteorological Survey of India Ltd Uppal, Hyderabad
- 47) M/s. MTAR Technologies Pvt Ltd Balanagar, Hyderabad
- 48) M/s. M V R Technologies Trimulghery, Secunderabad
- 49) M/s. Madhavi Constructions Manikonda, Hyderabad
- 50) M/s. Pearl Enterprises Ltd Jubilee Hills, Hyderabad
- 51) M/s. PVR Projects Pvt. Ltd.-Jubilee Hills-Hyderabad

- 72) M/s. Ashoka Lodge Ongole, A.P
- 73) M/s. Indrani Lodge Ongole, A.P.
- 74) M/s. Sai Sadguna Enterprises Madinaguda, Hyderabad
- 75) M/s. Sri Sai Raghavendra Constructions Attapur, Hyderabad
- 76) M/s. Cecon Builders Begumpet, Hyderabad
- 77) M/s. Swastik Constructions Manikonda, Hyderabad
- 78) M/s. Cyber Constructions Manikonda, Hyderabad
- 79) M/s. Mathesis Engineers Pvt Ltd R.C.Puram, Hyderabad
- 80) M/s.Gayathri Constructions Gachibowli, Hyderabad
- 81) M/s. Fantasy Foods Pvt Ltd Bowenpally, Secunderabad.
- 82) M/s. Mohan Constructions Manikonda, Hyderabad
- 83) M/s. Nikhil Constructions Manikonda, Hyderabad
- 84) M/s. Secure Ideas Koti, Hyderabad.

# **Technical Specifications**

# a) Vacuum tubes:

Gla	ss Material	High Boron Silicon 3.3 Glass
Outer Diam	eter and Thickness	0=47±0.77mm & = 1.6mm
Inner Diam	eter and Thickness	0=37±0.77mm & = 1.6mm
Vacuur	n Tube Length	1500(±5mm)
Absorptive Coating	Structure	Al-N/Al Selective Absorption Coating
Performance	Sediment Method	Direct Reaction Splash Jetting
	Absorbance	91%
	Emittance	8%
Vac	cuum Ratio	P≤5×10 <sup>-</sup> 3(Pa)
	on Parameter for Vacuum Tube	> 200M2C/KW
	ciliary Energy with ed Solarization	< 2.8MJ/M <sup>2</sup>
Average Heat Loss Coefficient		$U_{LT} < 0.8 \text{w (m}^2)$
Vacuum Tube I	Life	15 Years
No of Tubes in	manifold	1 Sets ( 30 tubes ) For 200LPD

## SOLAR POWER PACK

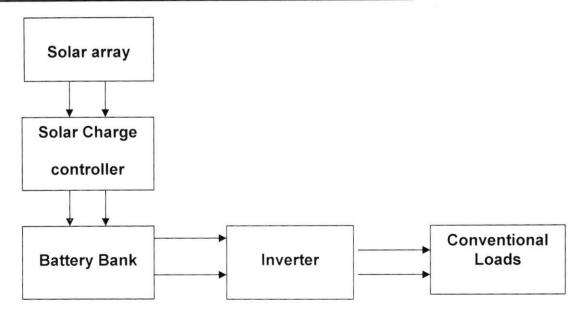
Solar Power pack systems are used to generate electricity that makes use of solar power. These systems are ideal for locations where grid is inaccessible or the access is prohibitively expensive. The Solar power pack can also be used in conjunction with existing grid to enhance the energy delivered at that particular location.

Solar power pack system consists of the following:

- a. Solar Photovoltaic Module array
- b. Battery bank
- c. Solar Charge Controller
- d. Inverter
- e. Mounting Structure for Solar Array
- f. Cable, MCBs, Hardware and other required accessories.

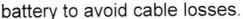
The electricity generated by the Solar array is stored in the Battery through Charge Controller. The loads are activated when required and is powered by the Battery through an Inverter. A change over switch is provided to transfer the load from Solar to grid and vice versa.

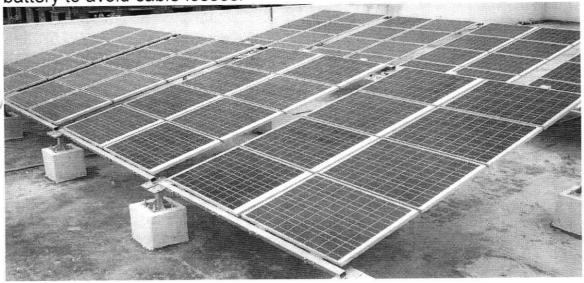
## The block diagram of the Solar Power Pack system



## Solar Array:

The Solar array consists of a set of Solar modules connected in a predetermined fashion to get the desired voltage and current. These modules are mounted on a Solar module mounting structure and installed at an angle equal to latitude of the site. The array will be installed towards south direction to collect maximum no of sunrays. The array is installed at a shadow free area and near to the





# Solar Charge Control Unit:

A charge controller unit is an electronic device which controls the charging of the battery by using solar photovoltaic module. It protects battery from over charging and deep discharging. It also provides indications of charging, deep discharging & rev. connection. It also arrests reverse current.

The charge controller is placed between solar module and the battery. When the sun intensity is more (or) the charging current from the panel is more the charge controller will pump only the required current to the battery.

It also controls the deep discharging of battery, it does not allow the load to use the battery after a certain limit, which increases the life of battery.

Without a charge controller, battery will over-charge. This can damage battery and it may be dangerous in other ways-it can even cause fires.

#### Inverter:

Inverter will convert the DC energy into AC energy to meet the conventional load demand for the predetermined period. It will also take care of the initial surge current required for inductive loads. The capacity of the Inverter will always be double the size of the load demand.

#### Battery:

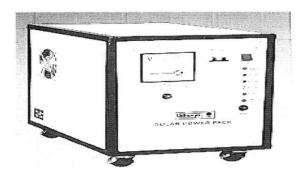
As the sun rays are not available during night time, batteries are used to store the power generated by Solar Photovoltaic Modules during sunshine time.

As the battery is a DC power storage device, Solar panel can charge the battery directly. But generally charge control unit is used in between solar module and battery.

#### Conventional loads:

The loads like Fluorescent lamps, Incandescent lamps. Ceiling fans, Television set, Music system etc. can be connected to the Power pack and can be used for the predetermined period without any interruption. The duration of the usage can be increased proportionately if the load management principle is implemented. In case of system failure the loads can be activated with the help of conventional energy by using a change over switch.

#### Inverter:



## The Function of the Inverter is as follows:

- It converts the DC input from the battery to AC output. Generally all over conventional loads operates on AC voltage.
- 2) It converts 12 volts input from the battery into 220V-240Volts.

The solar invertor will also have the facility for the Mains charging.

## **Mounting Structure**

Generally Mounting Structure is used for installing solar photovoltaic modules. The mounting structure consists of MS Angles with powder coating.

Generally the Solar Modules will be installed towards south direction with an inclination of 35-45 degrees.

# **QUOTATION FOR SOLAR POWER PACK**

<u>Note:</u> This inverter is not an intelligent inverter which means that if the solar power is not available for charging we have to manually switch over to the AC mains by using a change over switch provided by us.

## I. 500VA Solar Power Pack

Item Description	<u>Qty</u>	Cost in Rs.
1. Solar Photovoltaic Module (12V - 100Wp)	6Nos	72,000/-
<ul> <li>Low maintenance lead acid tubular Battery Bank (12V - 150Ah). (Make: HBL / Exide)</li> </ul>	2nos	28,000/-
<ol> <li>Inverter (12V - 500 VA) (Microtek/Sukam/Luminus/V Guard)</li> </ol>	1 No	10,500/-
4. CCU (12V-40Amps)	1 Set	15,000/-
5. Cables, MCBs and other hardware	1 set	5,000/-
Module Mounting Structure     (With civil works like grouting)	1set	18,000/-
7. Transportation charges	Lump sum	3,000/-
8. Installation and commissioning charges	Lump sum	15,000/-
Total amount		1, 66,500/-

(In words: One Lakh Sixty Six Thousand Five Hundred Rupees Only.)

# II. 1 KVA Solar Power pack

Item Description	Qty	Cost in Rs.
1. Solar Photovoltaic Module (12V - 100Wp)	12Nos	1,44,000/-
<ol> <li>Low maintenance lead acid tubular Battery Bank (12V - 150Ah) (Make: HBL / Exide)</li> </ol>	4nos	56,000/-
<ol> <li>Inverter (24 - 1KVA) (Microtek/Sukam/Luminus/V Guard)</li> </ol>	1 No	16,000/-
4. CCU(24V - 40Amps)	1 Set	22,000/-
5. Cables, MCBs and other hardware	1 Set	8,000/-
6. Module Mounting Structure	1set	25,000/-
7. Transportation charges	Lump sum	5,000/-
8. Installation and commissioning charges	Lump sum	20,000/-
Total amount		2, 96,000 / -

(In Words: Two Lakhs Ninety Six Thousand Rupees Only.)

#### COMMERCIAL TERMS AND CONDITIONS OF SUPPLY:

 For solar water heater: Overhead cold water tank at a height of 5 feet above rooftop level, hot water pipeline with insulation from solar system to end user points and cold water pipeline from over head tank to solar system have to provide by the customer.

**For Solar power pack**: Shaddow free area for installing solar photovoltaic module array will be provided by you.

- Payment Terms: 50% advance with purchase order, balance after completion of the work. Payment should be strictly made in the form of cheque (or) D.D. on M/s. Radiant Energy Technologies – Payable at secunderabad.
- 3. <u>Delivery Schedule</u>: As per your requirement. Generally 1week from the date of PO and advance payment.
- 4. Taxes and Duties: 4 % VAT extra
- Warranty: a) For Water heater: 3 years against any manufacturing defects
   b) For Power Pack System: 8 years for the solar panel, 2 years for the remaining system against any manufacturing defects.
   (warranty is as per the terms mentioned in our warranty card).
- 6. **Validity**: This quotation is valid for a period of 30 days from the date of preparation.

We hope that our offer is competitive enough and we look for your valued order.

Thanking you, For Radiant Energy Technologies,

Venkateswara Rao G Authorized Signatory

#### Purchase

From:

"Balakrishna T" <ap@nuetechsolar.com>

To:

<purchase@modiproperties.com> Friday, August 26, 2011 1:51 PM

Sent:

34 SWHS 200 FPC 26.08.2011.doc

Attach: Subject:

QUOTATION FOR THE SOLAR WATER HEATING SYSTEM REG

Dear srinivas rao garu

Greetings from nuetech solar systems pvt ltd

as per our telephonic discussion i had with you regarding the solar water heating system

herewith i am sending the quotation for 200lpd, 150lpd flate plate collector system and etc systems both

please fiend the attachment given below

if you have any doubts please feel free to contact undersigned

thank you for choosing our company

#### With Best Regards

#### T. BALAKRISHNA

Business Development Manager (AP)

-3K

Nuetech Solar Systems Private Limited

H.No. 1-7-574/23/B

Gemini Colony, Jamistanpur

Musheerabad, HYDERABAD-500 020

Mobile: +91-98857-13574

www.nuetechsolar.com

Mg 2/8/11



NSSPL/AP/TBK/2011-2012/034

Date: 26-08-2011

TO M/S MODI PROPERTIES SECUNDERABAD ANDHRA PRADESH

Kind Attn.: Mr. SRINIVAS RAO Garu

Sub: OFFER for Supply of Solar Water Heating Systems. (SWHS)

Dear Sir.

In continuation to the personal discussion the undersigned had with you regarding requirement of solar water heater. We thank you very much for your valuable enquiry and herewith enclosed is our best offer as below along with product catalogues.

As per the discussion the Requirement of solar water heater of capacity: 200 LPD & 150LPD Qty: 2 Nos.

In the systems offered by us, we have employed Thermosyphon type configuration (Natural circulation viz., Gravity flow system wherein the circulation between the solar collectors & hot water tank happens through gravity.) This results in avoiding use of water pumps, control panel etc., and the net system configuration becomes very simple, easy to maintain, and economical.

We are herewith enclosing our commercial offer, technical specification & company profile for your reference.

Thanking you and assuring you of our best services at all times, Yours truly,

For Nuetech Solar Systems Pvt Ltd

BALA KRISHNA. T Business Development Manager

## COMPANY PROFILE

NUETECH Solar Systems Private Limited (NSSPL) established in 1992, an ISO 9001-2008 Certified Company, is one of the most reputed and leading manufacturers of Solar Energy Devices including Solar Thermal Systems and Solar Photovoltaic Devices in India. NSSPL manufactures and supplies the widest range of Products and Components of Solar Water Heaters based on Flat Plate Collector and Evacuated Tube Technologies, and has over 1,25,000 satisfied customers of various applications such as residential households, hostels, hotels, hospitals, guest houses, service apartments, educational institutions, charitable trusts, industrial canteens, process industries and government establishments.

NSSPL's Solar Photovoltaic products include portable, indoor and outdoor lighting, Power Packs, Tail End Power Plants, off grid power plants. The portable lighting systems include lanterns, torches, etc., Indoor lighting includes home lighting systems, power packs, etc, Outdoor lighting includes streetlights, pathway lighting, garden lights, etc.,

Vision: To provide the best quality production and after sales service to our customers. Our main motto is quality and customer satisfaction. NUETECH came in to existence with the main intention of joining our hands in world common interest for conservation of energy and use of renewable solar energy in our

Day-to-day life. The company strongly stands for quality, reliability, honesty and punctuality

Strengths. NSSPL specializes in providing not only a wide range of top quality standard products, but also tailor-made Solar Energy Solutions using Global know-how to suit individual applications. NSSPL also aims at Total Customer Satisfaction by providing comprehensive services which include pre-investment

Consultancy, techno-commercial feasibility studies, energy audits, design of optimum systems, detailed project reports, guidance to attractive financing mechanisms, installation, testing & commissioning, training of O&M personnel and assured & professional post-installation services. NSSPL is the largest OEM supplier in India, supplying systems and components to leading manufacturers, system integrators and other reputed players in the market and has acquired high

Level of confidence among the OEM customers. NSSPL is also the market leader in the ETC systems segment and has been setting market standards by installing some of the best and biggest systems in India.

Manufacturing Plant: NSSPL has established a state-of-art, totally 9500 Sqft area in house manufacturing facility, at Sunkadakatte, Bangalore, with over 100 dedicated and highly motivated employees, in manufacturing, quality control, design, marketing, sales & service departments, and provides livelihood indirectly to over a 1,000 people including distributors, dealers, freelancers, channel partners, installers, etc,.

**Products:** The product range includes PUF and Rock wool insulated systems, suitable for all types of applications, such as

Heat exchanger type (for hard water/special applications), Pressurized type (for hydro pneumatic pressurized applications), thermosyphone (natural circulation), Fixed & Differential Temperature Controlled (FTC & DTC) systems, in the capacity range of up to 100,000 LPD (Liters Per Day) in 100, 125, 150LPD and their multiples.

\*\*\*\*

	SPECIFICATIONS e No CM/ L/ 6134657
Solar collectors:	
License No.	CM/ L/ 6134657
Temperature	60 Degree
Solar Insulation	5.5 kWh/ sqm / Day
(1) HEADER PIPE	
Material	Copper
Dia	25.5 mm
Wall Thickness	0.71 mm
(2) RISER PIPE	
Material	Copper
Dia	12.5mm
Wall Thickness	0.56 mm
No of Raiser	9 Nos
3) Absorber Absorptive	0.93
Emissivity	0.18
(4) Bonding between Header and Riser	Continues Brazing
(5) Bonding between Riser and Sheet	Continuous Ultrasonic welding.
(6) ABSORBER SHEET	
Material	Copper
Thickness	0.12 mm
Absorber Coating	Black chromium
(7) COLLECTOR BOX	
Material	Aluminum Extruded Channel
Size	2030 X 1030 X100 mm
Thickness of Materials	1.4 mm
Sheet for bottom	0.56 mm
Powder Coating color	Red & Yellow
(8) FRONT GLAZING	1100 0 1011011
	Toughened glass
Materials	Toughened glass
Thickness	4 mm
Make	Atul temp
Transmittance	85%
(9) BEADING AND GAS KET	E.P.D.M
(10) INSULATION	
Material	Resin banded Rock wool / Glass wool
Density	48 Kg./m³
Thickness	50 mm
(11) TESTING CONDUCTED	
ı) Hydraulic Test	For Leakage
(ii) Impact Test	Toughened Glass
(iii) Thermal Test	For Materials.
(iv) Temp. Raise Test	For Collector
(v) Rain Penetration Test	For Cover Plate
(12) ABSORBER APERTURE AREA	1.95 m Sq.
Spacing between cover plate bottom  And absorber surface	35 mm.

N/	COMMERCIAL C	FFER FPC TY	PE	
	Client : MOD			
SI. No.	Description	Unit Rate (in Rs.)	Qty.	TOTAL (in Rs.)
1	Design, Manufacture, Supply of Solar Water Heating System of capacity 200 LPD FPC TYPE@ 60 Deg. C, Thermosyphon type With 2 nos of ISI make collector insulated solar hot water tank and MS structural stands	36,000.00		
2	Taxes: VAT, Extra @ 5%		1,800.00	
3	SYSTEM COST (Item 1 + Item 2)		37,800.00	
6	Installation and commissioning charges		800.00	
7	Service tax on installation and commission		82.00	
6	TOTAL I&C CHARGES (ITEM 4&5)		882.00	
7	TOTAL PROJECT COST (ITEM 3&6)	38,682.00		
ds	INR THIRTY EIGHT	-		
SIX HUNDRED  EIGHTY TWO RUPEES Only				
드	EIGHTY TWO	RUPEES Only		

	COMMERCIAL O	FFER FPC TY	PE	
	Client : MOD	PROPERTIES		
SI. No.	Description	Unit Rate (in Rs.)	Qty.	TOTAL (in Rs.)
1	Design, Manufacture, Supply of Solar Water Heating System of capacity 150 LPD FPC TYPE@ 60 Deg. C, Thermosyphon type With 1 no of ISI make collector insulated solar hot water tank and MS structural stands	28,500.00	1	28,500.00
2	Taxes. VAT, Extra @ 5%			1,425.00
3	SYSTEM COST (Item 1 + Item 2)		29,925.00	
6	Installation and commissioning charges			800.00
7	Service tax on installation and commission	ning		82.00
6	TOTAL I&C CHARGES (ITEM 4&5)			882.00
7	TOTAL PROJECT COST (ITEM 3&6)			30,807.00
sp.	INR THIRTY	THOUSAND		
In words	EIGHT	HUNDRED And	d	
드	SEVEN	<b>RUPEES Only</b>		

	COMMERCIAL OFFER ETC TYPE							
	Client : MOD							
SI. No.	Description	Unit Rate (in Rs.)	Qty.	TOTAL (in Rs.)				
1	Design, Manufacture, Supply of Solar Water Heating System of capacity <b>200 LPD ETC TYPE</b> @ 60 Deg. C, Thermosyphon type With 30 nos of ETC Tubes, insulated solar hot water tank and MS structural stands	27,200.00	1	27,200.00				
2	Taxes: VAT, Extra @ 5%			1,360.00				
3	SYSTEM COST (Item 1 + Item 2)			28,560.00				
6	Installation and commissioning charges			800.00				
7	Service tax on installation and commission		82.00					
6	TOTAL I&C CHARGES (ITEM 4&5)		882.00					
7	TOTAL PROJECT COST (ITEM 3&6)	29,442.00						
cds	INR TWENTY NINE							
In words	FOUR	HUNDRED And	d					
	FOURTY TWO							

	COMMERCIAL C	FFER ETC TY	PE	
	Client : MODY	PROPERTIES		
SI. No	Description	Unit Rate (in Rs.)	Qty.	TOTAL (in Rs.)
1	Design, Manufacture, Supply of Solar Water Heating System of capacity <b>150 LPD ETC TYPE</b> @ 60 Deg. C, Thermosyphon type With 22 nos of ETC Tubes, insulated solar hot water tank and MS structural stands	23,250.00	1	23,250.00
2	Taxes: VAT, Extra @ 5%			1,163.00
3	SYSTEM COST (Item 1 + Item 2)			24,413.00
6	Installation and commissioning charges			600.00
7	Service tax on installation and commission	62.00		
6	TOTAL I&C CHARGES (ITEM 4&5)	662.00		
7	TOTAL PROJECT COST (ITEM 3&6)			25,075.00
rds	INR THIRTY EIGHT	THOUSAND		
In words	SIX	HUNDRED		
	EIGHTY TWI	RUPEES Only		

#### TERMS OF SUPPLY:

- 1 Price basis: Ex- Factory, Bangalore
- 2. Taxes: Extra, VAT @ 5% for the system. The same has been included in the above offer. Any variations in tax component at the time of supply will be charged extra to your account.
- 3. Freight: To pay basis (Extra at actual)
- 4. Delivery: Within **2 weeks** from the date of receipt of technically and commercially clear firm order.
- 5. Installation & commissioning charges: Included in the above offer.
  - Installation schedule: Within 1 week from the date of receipt of materials at site and upon receipt of necessary site clearances from your side.
- 6 Provision of cold and hot water distribution piping, electrical wiring of control panel, etc. Civil work will be under the scope of Purchaser
- 7. Payment terms. 50% advance along with the order and remaining 50% before dispatch
- 8. Validity: 1 Month.
- 9. Force majeure clause: This offer and resulting contract are subject to standard force majeure clause

Trust the above is in line with your req'ts and we look forward to your valuable purchase order confirmation

Thanking you and assuring you of our best attention and services at all times,

Yours truly,

For NUETECH SOLAR SYSTEMS PVT LTD

BALA KRISHNA. T Business Development Manager Mob: 098857 13574

Email: ap@nuetechsolar.com

Client:

# THE DIRECTOR M/s.MODI PROPERTIES AND INVESTMENTS PVT LTD

Secunderabad. Andhra Pradesh, India

Contact person:

Mr. Srinivas Manager Purchase.

Techno Commercial Proposal For Supply of 200 LPD Are 300 LPD "Solarizer Plus" Solar Water Heating System (SWHS) 10 Kg/Cm2 Pressurized Type, Solar Water Heating Systems.

## **List of Enclosures**

- Covering Letter
- Design Data
- Company Profile
- Technical Specifications
- Commercial Offer
- Esteemed Clientele

#### Submitted by:

#### M/s. EMMVEE SOLAR SYSTEMS PVT. LTD.

Corporate Office:
"Solar Tower", No.55, 6th Main, 11th Cross
Lakshmaiah Block, Ganganagar
BANGALORE – 560 024

CTC:

S. N. Beeresh Kumar / **Mr.Sham Dhulani ( Hyderabad )** M: 09980518195 / **9010169100.** 

419/11



Ref: ESSPL/BK/2011-12/180

5th September, 2011

THE DIRECTOR
M/s.Modi Properties And Investments Pvt Ltd.
Secunderabad,
Andhra Pradesh, India

Kind Attn.: Mr.Srinivas – Manager Purchase.

Sub:

TECHNO COMMERCIAL PROPOSAL for Design, Manufacture, Supply Of EMMVEE Make Solar Water Heating System (SWHS) Of assorted capacities 200 LPD Are 300 LPD (Liters Per Day) "Solarizer Plus" "10 Kg/Cm2 Pressurized Solar water heating systems for your M/s.Silver Creek Project (89 Villas) And M/s.Nilgiri Homes (95 Villas) for Bathing Purpose.

Respected Sir,

With reference to the above subject item, we thank you very much for the valuable enquiry & for providing us an opportunity to serve your esteemed organization.

In line with the discussion had with our Mr.Sham Dhulani, following is the brief description of our techno commercial proposal submission for the subject requirement :-

As advised and recommended by you hear by we proposed following system configuration.

77			<b>DESIGN DATA</b>					
	Building Desc.							
SI. No.	Project Name	Application	Solar Hot Water Envisaged (LPD)	Solar Hot Water Recommended (LPD)	Solar Water Heating System (SWHS) Configuration			
1	Silver Creek (89 VILLAS )	Bathing	200 @ 60 Deg. C. 300 @ 60 Deg. C.	200 LPD ARE 300 LPD	200 LPD x 89 Nos ARE 300 LPD x 89 Nos			
2	Nilgiri Homes (95 VILLAS)	Bathing	200 @ 60 Deg. C. 300 @ 60 Deg. C.	200 LPD ARE 300 LPD	200 LPD x 95 Nos ARE 300 LPD x 95 Nos			

- The proposed SWHS is based on Pressurized 10 Kg/Cm2 Pressure based operation and the design configuration given above is in tune with the same.
- In this principle called "THERMOSYPHON" (Natural circulation) And PRESSURISED Due to density
  difference between the cold & hot water, the lighter hot water flows up into the tank and the heavier
  cold water enters the solar flatplate collector. The circulation in the system during the heating process
  is purely due to the difference of density only. There is no other mechanical moving part, hence the
  system reliability is very high.
- Our battery limits are inter piping connection between the Flat Plate Collector Bank and the Hot Water Storage Tank.



- To generate hot water during non-sunny days, the system is provided with electric heating element with built-in thermostat as a backup.
- Piping connectivity of feed water to the SWHS and outlet from the same to the utility line is in customer scope. Cost of cold water piping, hot water piping, gate valves and taps as may be required for input/distribution line are not in our scope of supply.
- Any additional civil work/ structural work are under customer scope.

Herewith enclosed is our techno-commercial offer for the subject item.

Trust our submissions are in line with your requirements and meet your expectations.

We look forward to your valuable order confirmation and enable us contribute our mite to the noble mission of creating **eco-friendly & cost-effective buildings**.

Contact the u/s for clarifications, if any.

Thanking you and assuring you of our best attention and services at all times, we remain,

Yours truly,

For Emmvee Solar Systems Pvt. Ltd.

#### S. N. Beeresh Kumar

Divisional Manager – Sales & Marketing AP Division. H/P: 09980518195



#### **COMPANY PROFILE**

EMMVEE, established in 1992, is one of the leading brands & largest manufacturer of Solar Water Heating Systems, Lighting Systems and Solar Photovoltaic modules. With its commitment towards quality and reliability EMMVEE has become a household name in the Indian Solar industry. We are an ISO 9001-2008 certified company. Our consistent effort towards environmental conservation has won us ISO 14001 – 2004 certification. We are also the approved suppliers of MNRE (Ministry of New and Renewable Energy, Govt. of India).

The Solar Water Heating Systems manufactured by us are marketed under the brand name "Solarizer". We are a team of well-trained staff with technical expertise to respond to the needs of customers, in customizing the product to meet specific requirements and to take care of after sales service.

In order to have greater market reach we have diversified into manufacturing of Photovoltaic modules as per international standards. With an installed capacity of 135MW, State of the art Export Oriented Unit (EOU) facility for manufacturing high quality Mono / Poly Crystalline Photovoltaic Modules, We are very well equipped to produce Solar Modules from 10 Wp to 250Wp. Our modules are certified by TÜV as per IEC 61215 Ed 2 & also IEC 61730 – PV module safety qualification.

With world – class solar products manufactured at its state of the art manufacturing facility at Bangalore & its nationwide dealer network with its regional offices at strategic locations, **EMMVEE** is the preferred choice when it comes to giving their customer the best. Our products are approved by BIS, DGS & D, MNRE & IREDA and also eligible for soft loans.

We have state of the art Glass Toughening facility. All our glasses for domestic market of both Solar Thermal & PV products are processed in-house. We do also cater to sectors like Construction, Commercial Buildings, Furniture & Engineering industry.

With a manufacturing capacity of 5000 collectors per month, we are the undisputed leaders in the manufacturing of solar water heating systems.

Also very recently, our company was awarded the Second prize by MNRE for Solar Water Heater Manufacturer (2002 - 07) presented by Smt. Pratibha Devisingh Patil, Hon'ble President of India and SESI –BUSINESS LEADERSHIP AWARD -2008 presented by Mr. S. Raghupathy, Hon'ble Minister for State Environment and Forest on 16.10.2008 at Chennai.

We have a technical tie up with M/s **Solar Cap**, a leading Denmark based company to produce high quality Solar Water Heating systems for both domestic and export market. Apart from the details which we have furnished the above products has been tested and approved by **ETDC/CPRI/MNRE/State Nodal Agencies**.

We also undertake Design, Supply, Install, Commission and after sales service for Off-Grid & Decentralized and Rooftop & Solar MW projects as per site and customized requirements.



#### **EMERGING INDIA AWARD**

## EMMVEE Group - Generation Next India's Business Leader



Our Group Company EMMVEE Toughened Glass and Photovoltaic bagged the Emerging India Award for the best performing SME in Power and Telecommunications space from ICICI Bank Business Banking and CNBC- TV18 powered by CRISIL.

This award is given to nation's best SME who exhibit world-class leadership, outstanding business acumen, best practices and exemplary vision, creating a legacy for others to emulate.



EMMVEE Group Managing Director, Shri D. V. Manjunatha receiving the prestigious award in Macau



	CO	MMERO	CIAL PR	ОРО	SAL		
	EMMVEE M	ake Sol	ar Wate	r Hea	ting Sys	tem	
	M/s. Modi P Secund	ropertie	Client : s And In Andhra	vestm Prades	ents Pvt sh, India	Ltd.	
SI.	Description	иом	Syst Config or Unit	jurati 1	No. of	Config. Set	TOTAL
No.	2000, p.101	CON	Capac ity (in LPD)	Qty	FPCs	Unit Rate (`)	()
1.1	Design, Manufacture, Supply of EMMVEE Make 200 LPD Capacity "Solarizer Plus "10Kg /Cm2 Pressurized Solar Water Heating System @ 60 Deg. C,	Set	200	89	-	44,400.00	39,51,600.00
2	SUBTOTAL - 1						39,51,600.00
3	Taxes: Extra as applicable, Currently,	Interstate	e Tax, CS	ST @ 5	5%		1,97,580.00
4	SUBTOTAL - 2						41,49,180.00
5	Total Solar Flat Plate Collectors in the	Project (	in Nos.)				<b>进行的</b>
	Capital Subsidy Boundary Condition under MNRE's JNNSM Scheme, Govt. of India as mentioned below WHICHEVER IS LESS						
6	6.1 Condition 2 : 30% of the Basic	Cost (SI.	No.2)			11,74,380.00	(1) 计图 1
	Accepted Capital Subsidy Boundary Co	ondition '	Value				11,74,800.00
7	TOTAL PROJECT COST (SI.No.04 - SI.No.06)					29,74,380.00	
S	INR T\	VENTY	NINE	LAK	Н		
ord	SEV	ENTY	FOUR	THO	USANE	)	
In words		Т	HREE	HUN	IDRED		
_		EIC	HTY	UNI	T ONL	Υ.	

# Documents Required for claiming Capital Subsidy Amount from MNRE.

1) Address Proff: Electricity Bill Are Property Tax paid receipt.
2) Id Proof: Voter Id Are Pan Card.



#### COMMERCIAL PROPOSAL **EMMVEE Make Solar Water Heating System** Client: M/s. Modi Properties And Investments Pvt Ltd. Secunderabad, Andhra Pradesh, India System Configurati on Config. SI. **Unit Set** Set No. of TOTAL Description **UOM** No. Capac **FPCs** Unit (`) Qty ity Rate (`) (in LPD) Design, Manufacture, Supply of EMMVEE Make 300 LPD Capacity " Solarizer Plus " 10Kg /Cm2 Set 300 95 65,500.00 62,22,500.00 Pressurized Solar Water Heating System @ 60 Deg. C, 2 SUBTOTAL - 1 66,22,500.00 Taxes: Extra as applicable, Currently, Interstate Tax, CST @ 5% 3 3,11,125.00 4 SUBTOTAL - 2 69,33,625.00 5 Total Solar Flat Plate Collectors in the Project (in Nos.) Capital Subsidy Boundary Condition under MNRE's JNNSM Scheme, Govt. of India as mentioned below WHICHEVER IS LESS 6 Condition 2: 30% of the Basic Cost (Sl.No.2) 18,66,750.00 Accepted Capital Subsidy Boundary Condition Value 18,66,750.00 TOTAL PROJECT COST (SI.No.04 - SI.No.06) 7 50,66,875.00 INR FIFTY LAKH In words SIXTY SIX THOUSAND **EIGHT** HUNDRED SEVENTY FIVE | UNIT ONLY.

Documents Required for claiming Capital Subsidy Amount from MNRE.

3) Address Proff: Electricity Bill Are Property Tax paid receipt.

4) Id Proof: Voter Id Are Pan Card.



	TER	RMS AND CONDITIONS:
1	Price Basis	Suplay up to M/s.MODI Propertise Site And Installation of solar water heating systems.
2	Freight	Included in the offer.
3	Taxes	Extra, as applicable. Currently, CST @ 5% as shown in the above commercial proposal.  Any variation in the Tax component at the time of dispatch will be charged extra to your account.
4	Delivery	2 to 3 weeks from the date of receipt of techno- commercially clear Purchase Order with advance
5	Payment Terms	60% Advance along with Purchase Order. 30% Against Delivery. 10% Balance against commissioning of the systems.
6	Warranty	Five Years from the date of commissioning for Hot water Storage Tank. And One year for Solar FPC Collectors,
7	Warranty Exclusions	FPC Glass Pane, Electric Heating Element and Rubber Gasket Components.
8	Civil, Plumbing and Fabrication Works	Under Customer Scope.
9	Validity	10 days from the date of offer.
10	Force majeure clause	This proposal and resulting contract are subject to standard force majeure clause

Trust our proposal is in-line with your requirements and meets your expectations. Contact for clarifications, if any.

We look forward to your valuable purchase order confirmation and enable us contribute our mite to the noble mission of creating **eco-friendly & cost-effective buildings**.

Thanking you and assuring you of our best attention and services at all times, we remain, Yours truly,

For Emmvee Solar Systems Pvt. Ltd.

#### S. N. Beeresh Kumar

Divisional Manager – Sales & Marketing AP Division. H/P: 09980518195.



# ANDHRAPRADESH SOME OF OUR PRESTIGIOUS CUSTOMERS AT ANDHRA PRADESH ARE:

01 M/- C-1- 1'1 A B ' - B	
01.M/s.Splendid Aparna Projects Pvt . Limited, Hyderabad	- 105000 LPD
( 300 LPD PR x 335 No's Instoled At VILLA'S Project )	
02.M/s. Tirumala Tirupathi Devastanam, Tirumala	- 125000 LPD
03.M/s. Aliens Group Infra Private Limited, Hyderabad	- 70500 LPD
04.M/s. Thirumala Constructions, Kondapur Hyderabad	- 32000 LPD
04.M/s. Yeshodha Hospital,Kondapur Hyderabad	- 32000 LPD
05.M/s. RGM GROUP OF Intuitions, Nandyala	- 20000 LPD
05.M/s. INDUS Hostal , Kurnool	- 17000 LPD
06.M/s.Srivari Seva Sinidhi,Tirupathi	- 12000 LPD
07.M/s. Birla Instute Of Technology & Science, Hyderabad	- 12000 LPD
08.M/s .K. Krishna Reddy Contractors, Hyderabad	- 11500 LPD
09.M/s. Sri Lakshmi Constructions, Hyderabad 10.M/s. G.M.R Group, Ananthpur	- 10000 LPD
11.M/s. Swatantra Hospital, Rajamoundry	- 10000 LPD
11 M/s Sidbythe Academy of Medical Colors Village	- 10000 LPD
11.M/s. Sidhrtha Academy of Medical Science, Vijayawada 12.M/s.Pragathi Resorts, Hyderabad Pressurized	- 9000 LPD
12.M/s.Pragathi Resorts, Hyderabad Pressurized	- 8000 LPD
13.M/s. Aliens Develiopers Private Limited, Hyderabad Pressurized 14.M/s.KIMS, Amalapuram	
	- 7000 LPD
15.M/s.Geethangali educational society, Ragahmoundry 14.M/s. South Central Railway's, GNT, NDR, RGT, TPT,	- 7500 LPD
15.M/s. Siva Sivani International School, Secunderabad	- 6000 LPD
16.M/s. Hanuman Constructions, Tenali	- 6000 LPD
17.M/s. G.M.R Group, Ananthpur	9900 LI D
17.M/s. Kanakadhara Ventures Pvt Ltd ,Hyderabad (Pr - He)	- 5000 LPD
18.M/s. Reliance Industries Limited, Kakinada	- 5000 LPD
19.M/s. Navatha Transport Vishakapatnam.	- 5000 LPD
20.M/s. A.B.C Towers, Tadepalli	- 5000 LPD
21.M/s.Gayethri Hospital , Kukatpalli ,Hyderabad	- 4500 LPD
22.M/s.ABC Constructions, Guntur	- 5000 LPD
23.M/s.Sai Maharaja Villas,Ongole	- 4500 LPD - 4500 LPD
24.M/s.Shanti Dhama Vruddhashrama,Mantralayam	- 4500 LPD
25.M/s.Sai Teja Constructions,Guntur	- 4000 LPD
26.M/s.Vijaya Durga Residency, Guntur	- 4000 LPD
27.M/s.Anjaneya Arcade, Guntur	- 4000 LPD
28.M/s.Hotel Urvashi International,Ongole	- 4000 LPD
29.M/s.Kuppam Engineering Collage,Kuppam	- 3500 LPD
30.M/s.Hotel Time Square, Hyderabad Pressurized	- 3000 LPD
31.M/s.Sri Tirumala Sai Hotels (P) ltd,Hyderabad. Pressurized	- 3000 LPD
32.M/s Hotel Sai Selections, Puttaparthi	- 3000 LPD
33.M/s.Hotel Anupama Guest House,Hyderabad	- 3000 LPD
34.M/s.Vasavi Chathram , Manthralayam	- 3000 LPD
35.M/s.Sri Lakshmi Constructions,Ongole	- 3000 LPD
36.M/s.Hotel Sarovar, Vishakapatnam	- 3000 LPD
37.M/s.Sri Sathyasai Constructions,Guntur	- 3000 LPD
38.M/s.Prestige Constructions, Vijayawada	- 3000 LPD
00 16 0 1	LPD x 15 Nos
10 M/ D 11 D 1 T 1	LPD x 25 Nos
200	

## Educational Institutions / Hostel:

JSS Maha Vidyapeetha, Suttur Mutt, Mysore	- 78000 LPD
Karnataka University, Dharwad	- 60000 LPD
Devaraj Urs Group of Institutions, Kolar	- 60000 LPD
University of Agricultural Sciences (GKVK), Bangalore	- 70000 LPD
Tamilnadu State Govt.Backward & Schedule Caste Hostels	- 43000 LPD
Govt. Juvenile Home for Boys, Bellary	- 25000 LPD
Sainath Education Trust, Bangalore	
Backward Classes & Minorities Hostels, Davangere	- 29000 LPD
Social Welfare Department Hostels, Mysore	- 21000 LPD
M.S. Ramaiah Educational Institutions, Bangalore	- 18500 LPD
Magaziuma Instituto of Tochnology, Bangalore	- 29000 LPD
Nagarjuna Institute of Technology, Bangalore	- 14100 LPD
Rukmini Educational Charitable Trust, Girls Hostel, Bangalore	- 14000 LPD
Backward Classes & Minorities Hostels, Mysore	- 13000 LPD
R.N.S. Institute of Technology, Bangalore	- 7500 LPD
Francs Zavier Convent, Bangalore	- 7500 LPD
Sir M. Vishweshwaraiah Institute of Technology, Bangalore	- 7000 LPD
Ghousia College of Engineering, Ramnagara	- 6000 LPD
Social Welfare Department Hostels, Bangalore	- 6000 LPD
K.N.S. Institute of Technology, Bangalore	- 5500 LPD
Ambedkar Institute of Technology, Bangalore	- 4000 LPD
MVM Suma Educational Trust Yelahanka, Bangalore	- 4000 LPD
Tata Institute of Fundamental Research, Bangalore	- 3750 LPD
Prince Shivaji Maratha Boarding House Girls Hostel, Kholapur	- 6000 LPD
Indian Institute of Management, Bangalore	- 3000 LPD
Oxford College of Engineering, Bangalore	- 3000 LPD
Saraswathi Education Trust, Bangalore	- 3000 LPD
Bharathiya Grameena Mahila Sangha, Bangalore	- 3000 LPD
Kittur Rani Chennamma Hostel, Dharwad	- 3000 LPD
	2000 - 10

## Hospital / Medical Institution:

Jalappa Medical Hospital, Bangalore KLE Society's J.N.Medical College, Belgaum St. John's Medical College & Hospital, Bangalore Father Mullar Charitable Institutions, Mangalore M/s Yashodha Hospital, Hyderabad Sri Jayadeva Institute of Cardiology, Bangalore Sri Ramachandra Medical College Hospital, Chennai Kempegowda Institute of Medical Sciences (KIMS), Blr MVJ College of Medical Sciences, Hosakote. Sidharth Institute of Medical College, Vijayawada Indira Gandhi Childern Hospital, Bangalore Kerala State Co-Operative Hospital, Complex and		25000 LPD 40000 LPD 38000 LPD 34250 LPD 32500 LPD 31000 LPD 22000 LPD 10000 LPD 11000 LPD 9000 LPD 8500 LPD
Center for Advanced Medical Science Ltd. Wockhardt Hospital Ltd., Bangalore Gokulam Hospital, Salem Kidwai Memorial Institute of Oncology, Bangalore Sanjay Gandhi Hospital, Bangalore	-	8000 LPD 7750 LPD 7000 LPD 6750 LPD 5000 LPD

Sree Narayane Trusts Medical Mission-Kollam,Kerala	- 5000 LPD
Mother Hospital (P) Ltd., Kerala West Fort Hi-Tech Hospital Ltd, Thrissur Sankar Shashtyabdapoorthi Memorial Hospital, Kollam	<ul><li>4000 LPD</li><li>4000 LPD</li><li>3000 LPD</li></ul>

# Socail Welfare / Societies / Ashrams, etc.:

Tirumala Tirupathi Devasthan, Tirupati	- 124000 LPD
Sri Kasi Annapurna Vasavi Arya Sri Rama Charitable Trust, Tirupathi	- 11000 LPD
Jyothi Seva Society, Bangalore	- 4800 LPD
Arya Vyshya Seva Sanga, Mantralaya, Andhra Pradesh	- 7250 LPD
Dept. of Women & Children Welfare, Bellary	- 2500 LPD
Govt.Junior Bala Mandira, Bellary	- 2500 LPD
Alfansio Society, Bangalore	- 2200 LPD
Sevasadan Orphanage, Bangalore	- 2000 LPD
Kaigarika Adharita Balakara Sarkari Bala Mandira, Gadag	- 2000 LPD

## Institutional / Manufacturing:

Mysore Paper Mills, Bhadravathi S P Apparels, Coimbatore	- 15500 LPD - 15250 LPD
ITC Group, Bangalore	- 15000 LPD
Karnataka Land Army Corporation, Gulbarga	- 14000 LPD
Karnataka Silk Industries Corporation, Mysore	- 12000 LPD
Isha Foundation, Coimbatore	- 11500 LPD
Central Public Works Department, Bangalore	- 5500 LPD
P.S.B. Industries, Vishakhapatnam	- 5000 LPD
Kamala International, Kerala	- 4500 LPD
Hewlett Packard India Sales Pvt. Ltd., Bangalore	- 4000 LPD
Goutham Electricals, Bangalore	- 3000 LPD
Sai Selection, Puttaparthy	- 3000 LPD
Wipro Guest House, Bangalore	- 2500 LPD
ING Vysya Bank Ltd., Staff Training College, Bangalore	- 2000 LPD

#### Hotels:

Nalpad Hotels Pvt Ltd, Bangalore	-	19000 LPD
Fountain Hotel, Mahaballeshwar	-	17500 LPD
Bharath Group of Hotels, Konakone, Goa	-	9000 LPD
Premier Hotel, Karwar	-	8000 LPD
Hotel Sagari, Bangalore	-	6000 LPD
Ajantha Paradise, MG Road, Bangalore	-	6000 LPD
Hotel Sandesh Pvt.Ltd - Mysore	-	6000 LPD
Madhupa Lodge, Bangalore	-	5000 LPD
SOMAYAJI HOTEL PVT LTD., Bangalore	-	5000 LPD
Hotel Prabha International, Bangalore	_	5000 LPD
Hotel International, Goa	-	5000 LPD
Royal Maizons Lake View Resort, Goa	-	4850 LPD
HOLIDAY PALMS, (HOTEL PUSHPAMALA) BLR	-	4000 LPD
Hotel Saket, Mahabaleshwar	-	4000 LPD

Royal Conforts, Bangalore	- 4500 LPD
Royal Conforts, Bangalore  Shri Adigas Hotel, Bangalore Hotel Yashoda Towers, Hosur Hotel Sony Palace, Kolhapur Hotel New Pride, Sangli Rejesh Delux, Kolhapur Hotel Manorama and Jayashree Nurshing, Mangalore Durgamba Lodging, Bangalore Hotel Krishna, Bangalore Anand Residency, Bangalore Hotel Selvam, Salem Comforts, Bangalore Lalit Mahal Palace, Bangalore Hotel Manasa, Bangalore Radhakrishna Lodge, Bangalore Hotel Atish, Goa Hotel Neptune, Goa Hotel Vyshk, Mysore Sudarshan Lodge, Hosur Hotel Sona, Coimbatore Hotel Lalit Mahal Palace, Tamilnadu Vikram Lodge, Tirupur Hotel Sharon, Bangalore Tirumala Paradise, Bangalore Tirumala Paradise, Bangalore Tirumala Inn, Bangalore Hotel Ganesh Mahal, Bangalore Tirumala Inn, Bangalore Hotel Vishnu, Bangalore Hotel Vishnu, Bangalore Hotel Kritika Palace, Salem Sanpurna Lodge, Coimbatore Hotel Mayura Bhuvaneshwari(KSTDC), Kamalapur Hospet Hotel GLM Meridian, Chennai Hotel Maruti, Rajastan	- 4500 LPD - 3500 LPD - 3500 LPD - 3000 LPD - 2500 LPD - 2500 LPD - 2000 LPD - 1500 LPD
Hotel Nirmal, Siddapura Tirumala Lodge, Bangalore Pima International, Bangalore	- 1000 LPD - 1000 LPD
Rima International, Bangalore Balaji International, Bangalore Hotel Shivalaya,Bangalore	- 1000 LPD - 1000 LPD - 1000 LPD
Hotel City Meridian(Deluxe Lodge),Bangalore Shivganga Deluxe Lodge, Bangalore	- 1000 LPD - 1000 LPD
R. R. Comforts Deluxe Lodge, Bangalore Hotel Nest,Bangalore	- 1000 LPD - 1000 LPD
Surya Hotel , Ankola Dr. Cellar Clinic, Coimbatore	- 1000 LPD
Hotel Annamalai, Coimbatore	- 1000 LPD - 1000 LPD
Hotel Karpagam International, Chennai	- 1000 LPD

#### Govt. Departments:

# SOME OF OUR PRESTIGIOUS CUSTOMERS

# Apartment / Builders / Construction:

ETA CONSTRUCTIONS, Bangalore	- 100000 LPD
Foxconn Developers Pvt Ltd., Chennai	- 54750 LPD
Adarsha Developers ( Vista Project), Blr	- 10000 LPD
GMR-Developers (Raxa security services)	- 9100 LPD
Krishna construction Bangalore	- 10000LPD
G-Corp Projects Pvt Ltd, Blr	- 6400 LPD
KNS Constructions, Bangalore	- 6000 LPD
RPP Constructions, (CPRI, Bangalore)	- 5500 LPD
Insight Builders, Bangalore	- 5000 LPD
Nirman Shelters (Bangalore) Pvt Ltd., Bangalore	- 5000 LPD
Wipro Guest House	- 5000 LPD
Divyashree Developers, Bangalore	- 14000 LPD
Aliens Developers, Hyderabad	- 70000 LPD
Sobha Developers, Bangalore	- 47000 LPD
Splendid Aparna, Hyderabad	- 45000 LPD
Nagarjuna Construction Company Ltd., Bangalore	- 20000 LPD
Honest Housing Corporation, Kalyan	- 13800 LPD
SAB Estates, Kalyan	- 11300LPD
Charms Heritage, Kalyan	- 6500 LPD
Ashapura Enterprises, Kalyan	- 3000 LPD
Saket Group, Kalyan	- 5750 LPD
Amrut Palms, Kalyan	- 7250 LPD
Badri Palace, Titwala	- 3920 LPD
Shelar Residency, Kalyan	- 7840 LPD
Abhidarshan Housing, Titwala	- 8400 LPD
Golden Palms, Kalyan	- 6000 LPD
Sai Sankul, Kalyan	- 4000 LPD
Sree Krishna Homes, Bangalore	- 3000 LPD

ETC - Evacuated Tube Collector. FPC - Plat Plate alleem. 1 23,250 +5% WAT. I) Nutce. 2) ETC.-model. No 24,413/= - 60° Temp - 60°. - 22 mos tubes. b) Installaria - 15 60 0 = c) 8vc tan m lwt 621= Rs. 25,0 95 1= warranty derib I) Radiant Shar a) ETC - 19,000 +41/. - 19,760/= by Flat Cu plate - 1/2 24,960/= III) Photon Shar 160 Lpd. M 21,385 +5/. + last + Tport.

5 Par water heater - 150 lpday . 5/9/11

Wed. - Sept. 7, 2011 Emmuee Solan Systems Plate model.

Emmuee Cu. Hat Plate model.

Advantages - 10 bgs/cu² printer is SS tank. - 2 Km built in Elect. heater. suggested capacity 200 Lpd. -optimum. 150 lpd - not recommended as as 10-12 - - wasked after us age. 25 low × 5 Ml available = 125 lpd ruge +50 bas ruge As the plat. 175 Lpd -> 200 Lpd segd " - upfront subsidy. - lo 6600/= per cuplate.

P. F-0,

15.0 epd 100 60°C 2.5% sa 6600\$ 13-200 150 2004 10 70 12 13-200 W 1000

Mr. Shyam Derlani han informed that he has tertees permission from Hashoda, Sec'bed between 3 to 4 pm today. He arleed you to laythm of. Enco Not possible of get 19 whe 150 C. p.d. over my Surest, Choice Edution

VSC - Shar walt heater 1) What is The better model ECT or FPC. ashi) Tata Solar. ifton water ETC suggested 2) Ploton Solar - Fpl. 3) Ladiant Solar = - ETC 2) Petaclo Lrate Shyam Dulami- Emire. for FPC model. - tomorrow. Enver, - wonatry. Photon S Rat 11
Neight and 11 Mersliant show the may our no. I in give der on celler as to may India? Emvee, Photon Solar 4 hadiant Solar 4) I mill me deviding between as Tata doesn't have 150 LPd?

Lowy



TABP/CSL: MKTG: 11-12

08, 2011

Sep

To, Mr. Srinivas

Modi Properties, Ranigunj, Secunderabad.

#### Dear Sir

We thank you for the interest shown in renewable energy sources particularly in to days context of the scarce availability of conventional energy. It is therefore gratifying to note your interest in environmental issues and that you propose to be a user of non-polluting SOLAR products.

Choice Solutions Ltd., a 20 year old company has evolved into a multifaceted business with five core areas of business like Soft energy group (Solar) software products & services group, power protection group, and Software Development & Infrastructure Facilities Management group

Choice Solutions wants to be a part of the clean environmental revolution and focus on building infrastructure cost effective and high availability of power generation for domestic, agricultural, commercial and industrial applications. To achieve this objective Choice Solutions has tied up with one of the premier partners TATA BP Solar India Limited, a joint venture between the House of TATA and British Petroleum Solarex-USA. TATA BP Solar is the only Solar Company in the private sector in India to be awarded the prestigious ISO 9001 and ISO 14001 certification.

To know more about us, visit www.choice-solutions.com

We once again appreciate your interest in Solar products and await your positive response.

Thanking you. for Choice Solutions Limited

**Authorised Signatory** 





Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail <a href="mailto:qirik@choice-solutions.com">qirik@choice-solutions.com</a>: URL:www.choice-solutions.com



#### COMPANY PROFILE

### BACKGROUND

Tata BP Solar is a joint venture of Tata Power and BP Solar. Tata Power is a pioneer in Power Sector in India and one of the largest company in the Tata Group. BP Solar is one of the largest solar companies in the world. Tata BP Solar was incorporated on 27 Nov 1989 and the commercial production started on 1 Feb 1991.

The objective of the Company is to develop and propagate renewable energy in the form of Solar Power. Tata BP Solar's sophisticated manufacturing facilities in Bangalore are the largest of their kind for Solar Photovoltaic and Solar Thermal Products and Systems, in India. The Company designs, engineers, manufactures and installs these systems to cater to both domestic and industrial needs. For custom-designed solar electric projects, the Company employs computerized system-sizing design tools.

Through a well-developed countrywide network of offices, customer support centres and dealers, we are able to service our customers professionally and promptly.

### NATIONAL & INTERNATIONAL APPROVALS

Tata BP Solar has the distinction of obtaining ISO 9001 quality accreditation and ISO 14001 environmental standards accreditation from BVQI, London. Tata BP Solar products and systems have been accorded approvals by various test agencies such as:

- ISPRA Italy
- Underwriters Laboratories (UL)
- Factory Mutual (FM)
- Solar Energy Centre (MNES)
- Telecommunication Engineering Centre (DOT)
- DGS&D
- CQAL
- ONGC
- Central Power Research Institute
- World Health Organization
- Bureau of Indian Standards
- Asian Institute of Technology
- Arizona State University USA

Lor 8 9 11



Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail girik@choice-solutions.com: URL:www.choice-solutions.com



Research Designs and Standards Organizations (RDSO)

Another prestigious international recognition for Solar Modules from Tata BP Solar

An internationally recognized quality benchmark for photovoltaic products, the PV GAP Quality Mark is awarded to manufacturers for holding IECEE conformity assessment certification and ISO 9001 or similar Quality Management System Certification.

A much sought-after quality recognition in the PV industry in recent years. The PV GAP Quality Mark awarded to Tata BP Solar for its 1 Wp to 80 Wp TBP Mono and Poly Crystalline Solar PV Modules, places the Company in an enviable position amongst five other Companies.

We also have the PV GAP approval for BP Solar Module Series.

#### **PRODUCT RANGE**

- Solar Photovoltaic Cells
- Solar Photovoltaic Modules
- Solar Manpacks \*
- Solar Batteries
- Solar Charge Regulators
- Solar Home Lighting Kits
- Solar Streetlights\*
- Solar Lanterns
- Solar Water Pumping Systems
- Solar Drip Irrigation Systems
- Solar Power Packs for homes and offices
- Solar Powered Vaccine Refrigerator (as per WHO specifications)
- Solar Educational Kit
- Ecogenie Solar Power Packs
- Solar Power for Computers
- Solar Power Systems for Telecommunication & Television Broadcast
- Solar Powered Railway Signalling Systems
- Solar Power Systems for Off-shore Platforms
- Cathodic Protection of Pipelines
- Solar AC & Solar Diesel Hybrid Systems
- PV Wind Hybrid Systems
- Community Power Packs in various ratings
- Solar Powered Navigational Aids

Ang 9/11



Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail <a href="mailto:girik@choice-solutions.com">girik@choice-solutions.com</a>: URL:www.choice-solutions.com



- SPV Systems for Petrol Pumps
- Solar Grid Connect Power Plants
- Building Integrated Photovoltaic (BIPV) Systems
- Solar Powered Bus Shelters
- Solar Road Studs and Arrow Boards
- Solar Flashers
- Solar Powered Signals for Highways and Toll Gates
- Solar Aids for Disaster Management
- Domestic Solar Water Heating Systems
- Industrial Water Heating Systems 750 100,000 LPD
- Solar Swimming Pool Heating System
- Solar Driers for specific applications

### SOLAR SOLUTIONS FOR SPECIFIC SECTORS

- Tejas Solar Power Packs for Rural Education
- Sun Bank Solar Power Packs for Rural Banks
- Arogya Solar Solutions for Primary Health Centres
- Pragathi Solar Solutions for Rural Development
- Suraksha Solar Solutions for Road Safety
- Sanchar Solar Power Systems for Telecommunications
- Raksha Solar Solutions for Police Stations / Outposts

#### **EXPORTS**

Tata BP Solar is the only Indian Solar Company to regularly export solar cells, modules, solar power systems and solar hot water collectors to SAARC Countries, Australasia, USA, EU, Latin America, Africa, Afghanistan, Far East and the Middle East Nations.

#### **AWARDS**

Gold Award in the Engineering Category of the Indian Manufacturing Excellence Award (IMEA) 2005, instituted by Frost & Sullivan

ELCINA Award for Outstanding Achievement in Exports in the Large Scale Sector, for the year 2003 - 2004, from the Electronic Industries Association of India

First Prize for maximum Solar Water Heaters installed during 1996 2004, from the Govt. of

Karnataka and the Karnataka Renewable Energy Development Ltd.

Sectoral Award instituted by the Electronics and Computer Software Export Promotion



Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail girik@choice-solutions.com: URL:www.choice-solutions.com

to e/9/11



Council (India), in recognition of its export performance in the Non-SSI Category
 First Prize in the Non-SSI/Electronics Category for Outstanding Export Performance for the

years 2000, 2001, 2001-2002, 2002 03 and 2003-04. The Awards are instituted by the Department of Industries and Commerce, Govt. of Karnataka.

The International Award for Best Performance for the year 2001 2002, from the Council of

International Awards, UK

Niryat Shree and Niryat Bandhu Award by the Federation of Indian Export Organisation for

excellent Export Performance for the year 2000-2001 and 2001-2002

An Award from the Electronics and Computer Software Export Promotion Council for Excellence in Exports under Non-SSI: Electronic Components Category Special Award for Best Performance in Export of Solar Energy Products from Ministry of

Non-Conventional Energy Sources, Govt. of India

Rajiv Gandhi National Quality Award from Bureau of Indian Standards

Business Leadership Award for Photovoltaics from Solar Energy Society of India

Award from India Renewable Energy Development Agency for outstanding contribution

■ to the renewable energy sector

A Commendation by the CII Leadership & Excellence Award in Safety, Health and

Environment

#### **NETWORK**

Tata BP Solar has an extensive dealer / distributor network spread all over India and the neighbouring countries. We have set up a reliable, time-tested, trustworthy partnership with over 100 dealers in India. To improve visibility, we have opened a chain of Solar Shops managed by our dealers. This innovative retail concept is playing a pivotal role in popularising and selling solar products. We currently have our own offices in Delhi, Kolkata, Pune, Ahmedabad, Lucknow, Jammu, Leh, Raipur, apart from Bangalore.

Mga/"



Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail <a href="mailto:girik@choice-solutions.com">girik@choice-solutions.com</a>: URL:www.choice-solutions.com



### The Techno-Commercial Proposal (FPC Model)

### **TECHNICAL OFFER**

Flat Plate Coffer Collection

### 1. COLLECTOR SPECIFICATIONS

### BIS Approved and I.S.I mark

Collector Frame : Specially Designed Extruded Aluminum 16 swg
 Collector Make : TATA BP

3. Absorber Coating : Selective - NALSUN coating

4. Absorber Plate : Copper
5. Raiser : Copper
6. Inlet Header : Copper

6. Inlet Header : Copper /7. Bottom Insulation : 40 mm thick, Rock wool, below raiser assembly

8. Side Insulation : 25 mm thick Rock wool

9. Reflective Foil : Aluminum Sheet - 0.05 mm thick

10. Coating Absorptivity: > 0.90
11. Coating Emissivity: < 0.20
12. Transmitivity: 84 %

13. Glazing (Cover) : Toughened Clear Glass

14. Insulation : Rock wool 15. Grommet : EPDM

16. Gasket for Glass (Beeding): EPDM U type gasket17. Collector Back Sheet: Plain Aluminium sheet

18. Hardware : Stainless Steel – 304 / Zinc Plated

19. Finish
20. Sealing
Frame - Golden Yellow, Glass retaining angle - Matt Black
Silicon Sealant between Glass clamp and casing

20. Sealing : Silicon Sealant between Glass, clamp and casing21. Header Inlet & Outlet : Brass Flanaes

21. Header Inlet & Outlet : Brass Flanges22. Weight : Dry - 38 Kg, Flooded - 41 Kg

23. Collector support Structure: 35 x 35 x4mm & 20X20X3 MS angle, Epoxy & Black painted

24. Operating Conditions:
25. Wind Velocity:
10 Degree Cent. to 50 Degree Cent.
75 Km/Hr\*

26. Termination : 60 mm dia. Brass flanges with 4 holes of dia. 7 mm at PCD

45 mm, EPDM gasket & 4 nos of M6 x 20 SS 304 bolts

### Features –

Corrosion resistance, extruded aluminium sections with stainless steel fasteners

· High Transmissivity, toughened glass,

Designed, manufactured and certified as per "BIS" Specifications.

Design registered with Patent Office (Patent Reg. No. 175095)

CHOICE SOLUTIONS

Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail girik@choice-solutions.com: URL:www.choice-solutions.com



### 2. HOT WATER STORAGE TANK

1. Tank Type Horizontal 100 and 200 LPD Tanks 2. Capacity Equivalent to system capacity in LTRs 3.

Stainless steel 304 with End fittings of SS304 Material

Welding Type 4. TIG welding 5. Insulation Puf Insulation







### B. Commercial Offer for Flat Plate Collector Model

### 1. 100 & 200 LPD\_Solar Water Heating System @ 60 deg C\* Non pressurised

Sr.	Item & Description	Qty	Pata/Unit	A
1. /	100 LPD <b>Thermosyphon</b> type Solar Water	Qiy	Rate/Unit	Amount
X	Heating system @60 deg. C consisting of:	1 Set	28,000	28,000/-
	<ul> <li>i. <u>1 no x 100</u> lit. hot water storage tank – Puf insulated ,</li> </ul>		×	×
2.	ii 1 no's TBP make BIS approved solar flat plate collectors  200 LPD Thermosyphon type Solar Water Heating system @60 deg. C consisting of:	1 Set	44,000	44,000/-
	i. 1 no x 200 lit. hot water storage tank – Puf insulated ,			
	ii <b>2 no's</b> TBP make BIS approved solar flat plate collectors.			

Engl 9/1





### The Techno-Commercial Proposal (ETC Model)

Capacity of Hot water System

Make

No of Tubes

Circulation

Hot water Temperature

Inner Tank

Tank Welding

superior

Outer Cladding

Insulation

: High

Rock wool insulation

**Evacuated Tubes** 

Steel, Copper

obsorptivity of

Manifold Pipe automated TIG

Manifold Insulation

Manifold Cladding Support Structure

polyester

easy to

Anode Protection
Tube Dimensions

T | T

: 100 LPD & 200 LPD

: TATA BP SOLAR INDIA LTD.

: 15 / 30 No's

: Thermosyphon type

: 60 deg - 70 deg

: SS 304 2B Grade

: TIG Welding for Consistent Weld and

leak proof joints.

: Pre Coated galvanized steel

density

of uniform density

: Double walled hard borosilicate glass Tube with 1.6mm thick. With three layer

Selective coating (stainless

And Aluminium) with

> 92% and emittance < 7%.

: SS 304 2B Grade with

Welding.

: High Density 30 mm thick CFC Free

PUF Insulation

: Stainless Steel

: Tubular section steel with pure

Powder coated for long life and

Assembly.

: Magnesium

: Diameter 47mm and Length 1500mm

### 2. HOT WATER STORAGE TANK

1. Tank Type

Horizontal- 100 & 200 Ltr Thermosyphon



CHOICE SOLUTIONS LIMITED

Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail <a href="mailto:girik@choice-solutions.com">girik@choice-solutions.com</a>: URL:www.choice-solutions.com

48711



2. Capacity

Equivalent to system capacity in LTRs

3. Material

Stainless Steel 304 with End fittings of \$\$304

Welding Type

TIG welding

5. Insulation

Puf Insulation

### Commercial Offer for Evacuated Tube Collector System

### 1. 100 & 200 LPD\_Solar Water Heating System @ 60 deg C\* None pressurised

Sr.	Item & Description	Qty	Rate/Unit	Amount
1.	100 LPD <b>Thermosyphon</b> type Solar Water Heating system @60 deg. C consisting of:	1 Set	22,000	22,000/-
0.	ii. <u>1 no x 100</u> lit. hot water storage Puf insulated ,			
	ii <b>15 nos</b> Tubes TBP make BIS approved solar manifolds			
2.	200 LPD <b>Thermosyphon</b> type Solar Water Heating system @60 deg. C consisting of:	1 Set	34,000	34,000/-
	i. <u>1 no x 200</u> lit. hot water storage Puf insulated ,			
	ii <b>30 nos</b> Tubes TBP make BIS approved solar manifolds			





Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail <a href="mailto:girik@choice-solutions.com">girik@choice-solutions.com</a>: URL:www.choice-solutions.com



### Commercial Terms & Conditions

Price	Exyour site at , HYDERABAD
Freight	Excluding in above price
Taxes & Duties	VAT @ 4% on products
Transit Insurance	Included in above price
Delivery	Within 6-8 weeks from the date of receipt of purchase order along with advance.
Payment	50% advance with order 40% against delivery and balance 10% along-with Installation and
Warranty	commissioning charges within 10 days of installation.  12 months from date of Invoice against any manufacturing defects.
Validity	30 days from date of offer.
Other	Any other terms and conditions not mentioned over here shall be as per mutual agreement.

We trust, you would find the above proposal in lines with your requirements, and look forward to your valuable orders.

Thanking you and assuring you of our best services at all times

Yours sincerely



Plot No.50, Road No.72, Prashasan Nagar, Jubilee Hills, Hyderabad, A.P., 500033, India: Tel:+91-9030090401,040-27840155,23547600: Fax:040-27840156: mail <a href="mailto:girik@choice-solutions.com">girik@choice-solutions.com</a>: URL:www.choice-solutions.com

W

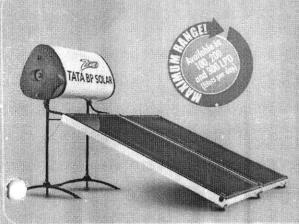
# YOUR BEST **SAVINGS** PLAN

Invest in a Solar Water Heater from Tata BP Solar and enjoy valuable savings on your electricity bills every month

You can get your investment back in less than 3 years!

For the widest range in Flat Plate and Evacuated Tube Solar Water Heaters, contact INDIA'S LARGEST SOLAR COMPANY today!

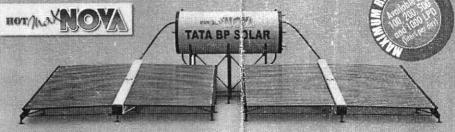






- · Unique shape of tank
- PUF insulation
- Copper tubes of highest standard
- · Laser welding of collectors
- Anti-condensation system
- · Systems available for hard water and pressurised applications

# Tata BP Solar - The first company in India to launch EVT system with Manifold

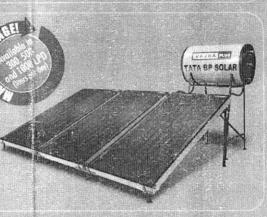


- Evacuated Tube Technology
- High Performance Glass Tubes
- · Short Boy Design Lesser System Height More Compact
- Suitable for sloped roof installation since the collector and tank are separate.
- EVT manifolds compatible for pressurised systems



### VAJRA PLUS

- PUF insulation
- · Copper tubes of the highest standards
- Laser welding of collectors
- · Anti-condensation system
- · Also available Vajra Plus Pressurised Solar Water Heaters and Vajra Plus Heat Exchanger Solar Water Heaters





#### TATA BP SOLAR INDIA LIMITED

78 Electronics City Hosur Road Bangalore 560 100 TATA BP SOLAR Tel 080 4070 2000 Fax 080 2852 0116 Email tatabp@tatabp.com

#### Regional Offices:

Ahmedabad Tel 079 6541 6676 • Kolkata Tel 033 64550452 Leh Telefax 01982 251551 . Lucknow Tel 0522 2356664 Noida Tel 0120 4746100 . Potna Telefax 0612 2231426 Pune Tel 020 26138783 • Raipur Tel 0771 4094455

Your nearest Tata BP Salar Dealer :

Due to continuous developments and product improvement, the Company reserves the right to change/after the specifications.

www.tatabpsolar.com

### Gaurang

From:

"Ram Murthy" <mrmurthy@photonsolar.in>

To:

"Modiproperties" < gaurang@modiproperties.com>

Sent:

Wednesday, August 31, 2011 3:39 PM

Attach:

Modipropaties\_200Lpd qt.doc; BROUCHER.pdf; Photon Thermal Profile ver 3.pdf

Subject:

Re Quote needed

Dear Sir,

Lam Sending our quotation,

Please find attach files.

We await further feedback from you.

In case of any discussions, please feel free to contact us immediately.

Waiting for your positive reply at the earliest sir.

Thanking you sir,

With thanks & regards,

### M.Ramamurthy, Manager,

PHOTON ENERGY SYSTEMS LIMITED,

#8-2-686/DB/19, Mount View Enclave,

Road No: - 12, Banjara Hills,

Hyderabad....34, (A.P)

Phone:-(040)2331337,/38/39.

Mobile: - 9000333 767, 9299604591.

Fax: - (040) 2333 1340.

memurth vic photonsolar.in

www.pinotonsolar.com.

Net of of the formal of the state of the sta

10 my 2 9 111

olar.in> wrote:

On Fri. Aug 26, 2011 at 3:51 PM, Photon Purchase <purchase@photopsolar.in> wrote:

see below mail

----- Forwarded message -----

From: **Gaurang** < gaurang *u* modiproperties.com>

Date: 26 August 2011 14:09

Subject: Quote needed

l'er su les e photonsolus ve

Cc. practage a phorMisoiar in

To.
The Manager.

Dear Sir.

Let him

Let him

EVE

PL (FCP)

FCP on 77

Lam writing to you on behalf of my company - Modi Properties and Investments Pvt. Ltd, based in Secunderabad and Hyderabad. We provide residential housing to middle income group of people. We construct apartments and bungalows. You may visit our website: wwww.modiproperties.com for an overview of our projects.

02-Sep-1!

Fr our Villas at Silver Creek site, we are in requirement of 150ltrs and 200ltrs capacity Solar Water heating system. Yours is one of the most reputed companies dealing with this system.

Please email me detailed quotes for the same. And also your Hyderabad office Sales manager and Technical Manager mobile numbers.

Requirement is urgent

Thanking you

Yours truly,

Mr Gaurang Mody, Director

12/9/11

### PHOTON ENERGY SYSTEMS LIMITED



REGD OFFICE. Plot No.775-K. Road No.45, Jubilee Hills, Hyderabad-500 033

Ref: PESL/JUL/D/PRG - 225,

Date: 30-08-2011.

the Director,
M. S. MOUN PROPERTIES AND INVESTMENTS PVILITD,
SECUNDER ABAD AND HYDER ABAD.

Dear Sir.

Sub.: Offer for Solar Water Heating System,

We thank you for the courtesy extended to us during our discussion, and thank you for showing interest in our product. We are pleased to introduce our self as one of the leading manufacturer's of solar water heating systems in India and are proud to state that we are pioneers and trendsetters in the industry. We are a 14 years old company having more than 1000 lakh liters of installation experience in solar water heating system. We are the first & largest ETC Solar Company in India.

Our solar PV panels are the best in the industry, and are well known for our quality products with reliable after sale service, our dealers and service center network has crossed leaps and bounders of the countries in Asia, Europe, America & Africa. As many as 6 leading brands in India are buying from us and distributing in there brand in India and abroad.

By this back ground we are claiming that we have capabilities to execute a project of this magnitude and installation in your site.

Find our below our best competitive price, this is as per MNRE (Ministry of New & Renewable Energy Delhi, Government of India) technical specifications.

We have the capability, confidence, technical excellence, and manufacturing base to satisfy your requirement and make this project a success . Awaiting your positive reply at the earliest, for any clarifications please feel free to contact us.

For Photon Energy Systems Ltd

Ramamurthy, Manager - Marketing, Cell- 9000 333767, 99497 61819, 9299 604591.



### OUR PRESTIGEOUS CUSTOMERS INCLUDE

•	N.B.C.C. (National Building Construction Corporation)	1,00,000 Liters,
•	R.V.Nirman Pvt Ltd, Hyderabad	64,500 Liters,
9	B.R.C. (Baba Atomic research Center)	50,000 liters,
•	Safire International School, Ranchi	50,000 Liters,
•	T.T.D, Tirumala Thirupathi Deavasthanam	45,000 Liters,
•	R.F.L. Bangalore	40,000 Liters,
•	R.W.F. Bangalore	30,000 Liters,
•	Sri Ramanada Theertha Collage, (Purbhany, Nanded)	30,000 Liters,
•	N.R.S.I. (National Remote Sensing Agencies)	25,000 Liters,
•	Sai Thirumala Constructions, Hyderabad	24,500 Liters,
e	Agriculture University, Nanded	20,000 Liters,
•	Bhashyam Public School, Guntur	20,000 Liters,
9	M/S. Peril (Imran & Gurugom) Jaipur, Rajasthan	20,000 Liters,
•	M/S Synthokem Labs Pvt Ltd, Hyderabad	20,000 Liters,
•	Hotel Jetty Grand, Rajahamundry	10,000 Liters,
8	Amrely Power Projects, Gujarat	10,000 Liters,
9	M/S.Thulasi Super Speciality Hospital's	10,000 Liters,
•	Maharastra P.W.D.	9,000 Liters,
•	Sharon Hospitals	9,000 Liters,
e	APPA, (A.P. Police Academy) Hyderabad	6,000 Liters,
9	C.M.R.Central	5,000 Liters,
۰	Sri Krishna Constructions	5,000 Liters,
•	M/s Jayalaxmi food products	5,000 Liters,
0	Hotel Sneha Residency, Annavaram	5,000 Liters,
9	N.T.P.C. Ramgundam	3,000 Liters,

## Commercial Offer

FOR SOLAR HOT WATER HEATING SYSTEM,

Model: E.T.C.

\	System Description	Qty	Price / unit In Rs	Total Amount
	Supplying of <i>Photon Miracle</i> Solar Water Heating System [2001 PD] @ 60 to 70 Deg Non Pressurized System. No of Tubes: 30 No's, With Aluminum Reflectors,	01 No	24,882/-	24,882 = 00 Including
	M.S. Stand, with electrolyte Powder Coated, (Block).			Including
	Hot Water Storage Tank, Inner Tank: SS 304 Grade,			
	Outer Tank: SS 430 Grade,			
	Insulation with: P.U.F.			
	Electrical Heater, Capacity: 1.5 Kw (Backup for Hot water Storage Tank) Using for non sunny days Required Hardware's for System			Including
	Installation, Testing & Commissioning Charges		Each System 500/-	Extra
	Transportation Charges		Each System Rs:450/-	Extra
	Vat @ 4%			Extra
			Grand Total:	As per billing

For PHOTON ENERGY SYSTEMS LTD,



Authorized Signature.

## Commercial Offer

FOR SOLAR HOT WATER HEATING SYSTEM, Model: F.P.C.

S.N 0.	System Description	Qty	Price / unit In Rs	Total Amount
	Supplying of <i>PHOTONIZER</i> Solar Water Heating System 200 LPD @ 60 to 70 Deg C Non Pressurized System, Connection with Hose pipe	01 No	34,340/-	34,340 = 00
2	No of Collectors: 02 No's,  MNRE & BIS APPROVED,			Including
	M.S. Stand, with electrolyte Powder Coated, (Block).			Including
	Hot Water Storage Tank, Inner Tank: SS 304 Grade,			
	Outer Tank: SS 430 Grade, Insulation with: P.U.F.			
	Electrical Heater, Capacity: 1.5 Kw (Backup for Hot water Storage Tank) Using for non sunny days			Including
	Required Hardware's for System			Including
	Installation, Testing & Commissioning Charges		Each System 500/-	Extra
	Transportation Charges		Each System Rs:450/-	Extra
	Vat @ 4%			Extra
			Grand Total:	As per billing



### For PHOTON ENERGY SYSTEMS LTD,

Authorized Signature.

### TERMS & CONDITIONS

Payment Terms	50% Advance along with purchase order, 50% Before the dispatch,
Validity	30 Days from offer date
Installation cost	Extra
Transportation Cost,	Extra
Taxes	Vat @ 4% Extra,
Delivery	Within 07 working days,
,	We conceder after receiving of purchase order,
	along with Advance,
Warranty	One year for Tank
	And 5 years for Collectors / Vacuum Tube,
	(Inside Block Chromium Coating).
	Warranty is not applicable for breakages and Scaling.
Plumbing &	> System internal piping only – Including,
wiring	> System Grouting, Cool water inlet and out let connections,
	Electrical wiring all are customer scope.
Require Place	For F.P.C. Model:
in terrus install	East-West: 2 ½ Mts,
for the System,	
	South-North: 3 Mts,
	For E.T.C. Model
	East-West: 2.52 Mts,
	North-South: 1.8 Mts,

Ma/11



### For PHOTON ENERGY SYSTEMS LTD,

Authorized Signature.

FLAT PLATE COLLECTOR SPECIFICATION

Collector Size	(2014 X 1014 X 100) ± 2 mm
Collector box	Extruded Aliminium, Make – Bhoruka / Jindal
	Grade - 6060 T5; Thickness - 1.6mm
Finish	Anodized; Color – Natural; 15 Microns
Glass retaining angle	Extruded Aluminium, Make – Bhoruka
	Grade – 63400; Thickness – 1.2mm thickness
Back sheet	Aluminium 22SWG, Riveted & sealed
Glass	4mm, toughened, low iron content with 85%
	Minimum Transmissivity
Glass Beading/ sealing	EPDM Full length without joints
Grommets	EPDM with inside/outside locking collar
End connection	4mm thick brass flanges with EPDM gaskets
Insulation	48 kg/M³ density Rock wool

Aliminium 50 microns

Sealed from inside with Silicone Sealant

### (b) ABSORBER ASSEMBLY:

Collector Assembly teature

Reflective foil

Frame Corners

(a) FRAME ASSEMBLY:

Coating	Selective, black chrome – NALSUN
	Absorotivity $-96.00 \pm 0.02$
	Emmissivity $-0.12 \pm 0.02$
Bonding between Fin & Raiser	Laser welding
Bonding between Header &	Metallurgical bonding
Raiser	
Fin	99.9% Copper

Good finish



Number of fins	09 for 100 LPD & 12 for 150 LPD
lest pressure	5.0 Kg/Cm <sup>2</sup>
Header	99.9% ± 0.01 Copper - 1" x 22 SWG
Riser	99.9% ± 0.01 Copper – ½" x 22 SWG

# ETC GLASS TUBE SPECIFICATIONS



### HIGH PERFORMANCE GLASS TUBES

### TECHNICAL SPECIFICATION OF VACUUM TUBE

	Length	1500 mm
1.	Outer tube diameter	47 mm
2.	Inner tube diameter	37 mm
3.	Weight	1.3 Kg
4.	Glass Thickness	1.7 mm
5.	Material	Borosilicate Glass 3.3
6.	Absorptive Coating	Graded A1/N/AL
7.	Vacuum Degree	P < 5*10 - 3 Pa
8.	Thermal Expansion	3.3*10 - 6 C
9.	<b>Insulation Temperature</b>	> 200 C
10.	Absorptions	> 95 %
11.	Emittance	< 5 %
12.	Heat Loss	< 0.8 W/ (M2 C).
13.	Maximum Strength	0.8 Mpa
14.	Lifetime	15 to 20 Yrs
15.	Resist Cold	- 35 C
16.	Resist hailstone	25 mm Q Dia
17.	Resist Wind	30 M/S
18.	Start – up Temperature	<= 20 C

### FEATURES

- High quality tubes made form borosilicate glass,
- 2. Withstands high impact from hail storms,
- 3. No clogging or choking,
- 4. Long life,

En 29/11



- 5. Inner coating of tubes consists of layers of copper, stainless steel and aluminum nitride,
- 6. Heat water to a very high temperature,
- 7. Availability of hot water even on partially cloudy days,
- 8. 3 Layers Coated Tubes,
- 9. PHOTON Brand.

TANK / AC	CESSORIES SPECIFICATION
Tank:	
Tank Capacity	200 LPD
Туре	Horizental – @ 1.0 kg / Cm <sup>2</sup>
Tank Material	S.S304
End Fittings	1 1/4" BSP
Tank Insulation:	
Material	PUF
Thickness	55 mm / As required.
Cladding	G.I. Powder Coated.
Finish – Shell	Al with sticker
Finish – Dish	Al
Stands For solar collector:	
Material	MS ISA 35 x 35x 4 thick
Finish	Electrostatic Powder coated - PP
Type	Fixed / demountable as per site
System internal piping: Hot &	Cold
Material	As per design
Size	1 & 1 ¼ as per design
Length	As req at the site
Other Accessories for tanks :	
Air Release Valve	Air vent pipe
Air Supply Valve	As Per Site
Pressure Release Valve	Not Required
Control panel	DTC
Pumps & for internal circulation	1 HP ( Approx)

Thanks and regards

For M/s Photon Energy Systems Ltd.

Lagla /11



Mr. Ramamurthy, Manager Marketing, Mol: 9000 333 767, 99497 61819, 9299 60 4591.

form 9/11

### Gaurang

From:

"Ram Murthy" <mrmurthy@photonsolar.in>

To:

"Modiproperties" < gaurang@modiproperties.com>

Sent:

Wednesday, September 07, 2011 5:52 PM

Attach:

Modipropaties\_160Lpd qt.doc

Subject:

Photon Energy Systems Ltd, reg. Quotation....

As per our phone discussion,
I am Sending our quotation for ETC: 160 Lpd, FPC:125 Lpd,
Please find attach files.

With thanks & regards,

M.Ramamurthy, Manager,

PHOTON ENERGY SYSTEMS LIMITED, #8-2-686/DB/19, Mount View Enclave,

Road No:- 12, Banjara Hills,

Hyderabad....34, (A.P)

Phone :-(040)2331337,/ 38 / 39.

Mobile: - 9000333 767, 9299604591.

Fax: - (040) 2333 1340. mrmurthy@photonsolar.in www.photonsolar.com.

Michalme .
Commander .
Command

### PHOTON ENERGY SYSTEMS LIMITED



REGD.OFFICE: Plot No.775-K, Road No.45, Jubilee Hills, Hyderabad-500 033

Ref: PESL/JUL/D/PRG - 225,

Date: 08-09-2011.

To,
The Director,
M/S. MODI PROPERTIES AND INVESTMENTS PVT.LTD,
SECUNDERABAD AND HYDERABAD.

Dear Sir,

Sub.: Offer for Solar Water Heating System,

We thank you for the courtesy extended to us during our discussion, and thank you for showing interest in our product. We are pleased to introduce our self as one of the leading manufacturer's of solar water heating systems in India and are proud to state that we are pioneers and trendsetters in the industry. We are a 14 years old company having more than 1000 lakh liters of installation experience in solar water heating system. We are the first & largest ETC Solar Company in India.

Our solar PV panels are the best in the industry, and are well known for our quality products with reliable after sale service, our dealers and service center network has crossed leaps and bounders of the countries in Asia, Europe, America & Africa. As many as 6 leading brands in India are buying from us and distributing in there brand in India and abroad.

By this back ground we are claiming that we have capabilities to execute a project of this magnitude and installation in your site.

Find our below our best competitive price, this is as per MNRE (Ministry of New & Renewable Energy Delhi, Government of India) technical specifications.

We have the capability, confidence, technical excellence, and manufacturing base to satisfy your requirement and make this project a success . Awaiting your positive reply at the earliest, for any clarifications please feel free to contact us.

For Photon Energy Systems Ltd

Ramamurthy, Manager – Marketing, Cell- 9000 333767, 99497 61819, 9299 604591.

engla II



## OUR PRESTIGEOUS CUSTOMERS INCLUDE

	N.B.C.C. (National Building Construction Corporation)	1,00,000 Liters,
	R.V.Nirman Pvt Ltd, Hyderabad	64,500 Liters,
•	B.R.C. (Baba Atomic research Center)	50,000 liters,
•	Safire International School, Ranchi	50,000 Liters,
•	T.T.D, Tirumala Thirupathi Deavasthanam	45,000 Liters,
	R.E.L. Bangalore	40,000 Liters,
•	R.W.F. Bangalore	30,000 Liters,
	Sri Ramanada Theertha Collage, (Purbhany, Nanded)	30,000 Liters,
	N.R.S.I. (National Remote Sensing Agencies)	25,000 Liters,
	Sai Thirumala Constructions, Hyderabad	24,500 Liters,
•	Agriculture University, Nanded	20,000 Liters,
	Bhashyam Public School, Guntur	20,000 Liters,
	M/S. Peril (Imran & Gurugom) Jaipur, Rajasthan	20,000 Liters,
•	M/S Synthokem Labs Pvt Ltd, Hyderabad	20,000 Liters,
•	Hatal John Crand Rajahamundry	10,000 Liters,
	Amrely Power Projects, Gujarat	10,000 Liters,
	M/C Thulasi Super Speciality Hospital's	10,000 Liters,
	Maharastra P.W.D.	9,000 Liters,
	Sharon Hospitals	9,000 Liters,
,	• APPA, (A.P. Police Academy) Hyderabad	6,000 Liters,
	• C.M.R.Central	5,000 Liters,
	Sri Krishna Constructions	5,000 Liters,
	<ul> <li>M/s Jayalaxmi food products</li> </ul>	5,000 Liters,
	Hotel Sneha Residency, Annavaram	5,000 Liters,
	N.T.P.C. Ramgundam	3,000 Liters,

AN c/9/11



# Commercial Offer

## FOR SOLAR HOT WATER HEATING SYSTEM, Model: E.T.C.

S.N 0	System Description	Qty	Price / unit In Rs	Total Amount
1,	Supplying of <i>Photon Miracle</i> Solar Water Heating System 160 LPD @ 60 to 70 Deg Non Pressurized System.	01 No	21,367/-	21,367 = 00
2,	No of Tubes: 24 No's, With Aluminum Reflectors,			Including
3,	M.S. Stand, with electrolyte Powder Coated, (Block).			Including
4,	Hot Water Storage Tank, Inner Tank: SS 304 Grade, Outer Tank: SS 430 Grade,			
	Insulation with: P.U.F.			
5,	Electrical Heater, Capacity: 2 Kw (Backup for Hot water Storage Tank) Using for non sunny days			Including
6,	Required Hardware's for System			Including
7,	Installation, Testing & Commissioning Charges		Each System 500/-	Extra
8,	Transportation Charges		Each System Rs:450/-	Extra
9,	Vat @ 4%			Extra
			Grand Total:	As per billing

For PHOTON ENERGY SYSTEMS LTD,

Anny 9/11



Authorized Signature.

# Commercial Offer FOR SOLAR HOT WATER HEATING SYSTEM,

Model: F.P.C.

S.N 0.	System Description	Qty	Price / unit In Rs	Total Amount
1,	Supplying of <b>PHOTONIZER</b> Solar Water Heating System 125 LPD @ 60 to 70 Deg C Non Pressurized System, Connection with Hose pipe connection	01 No	28,486/-	28,486 = 00
2,	No of Collectors: 01 No,  MNRE & BIS APPROVED,			Including
3,	M.S. Stand, with electrolyte Powder Coated, (Block).			Including
4,	Hot Water Storage Tank, Inner Tank: SS 304 Grade,			
	Outer Tank: SS 430 Grade, Insulation with: P.U.F.		×	
5,	Electrical Heater, Capacity: 1.5 Kw (Backup for Hot water Storage Tank) Using for non sunny days			Including
6,	Required Hardware's for System			Including
7,	Installation, Testing & Commissioning Charges		Each System 500/-	Extra
8,	Transportation Charges		Each System Rs:450/-	Extra
9,	Vat @ 4%			Extra
			Grand Total:	As per billing



Authorized Signature.

## **TERMS & CONDITIONS**

Payment Terms	50% Advance along with purchase order,
	50% Before the dispatch,
Validity	10 Days from offer date
Installation cost	Extra
Transportation	Extra
Cost,	
Taxes	Vat @ 4% Extra,
Delivery	Within 07 working days,
	We conceder after receiving of purchase order,
	along with Advance,
Warranty	One year for Tank
/	And 5 years for Collectors / Vacuum Tube,
	(Inside Block Chromium Coating).
✓	Warranty is not applicable for breakages and Scaling.
Plumbing &	> System internal piping only – Including,
wiring	> System Grouting, Cool water inlet and out let connections,
	Electrical wiring all are customer scope.
Require Place	For F.P.C. Model:
in terrus install	
for the System,	East-West: 2 Mts,
, , , , , , , , , , , , , , , , , , ,	South-North: 2.5 Mts,
	For E.T.C. Model
	East-West: 2 Mts,
	North-South: 1.5 Mts,



### For PHOTON ENERGY SYSTEMS LTD,

Authorized Signature.

FLAT PLATE C	OLLECTOR SPECIFICATION
	1
(a)FRAME ASSEMBLY:	6.7 × 3.3 80' × 40" × 4"
Collector Size	(2014 X 1014 X 100) ± 2 mm
Collector box	Extruded Aliminium, Make – Bhoruka / Jindal Grade – 6060 T5; Thickness – 1.6mm
Finish	Anodized; Color – Natural; 15 Microns
Glass retaining angle	Extruded Aluminium, Make – Bhoruka Grade – 63400; Thickness – 1.2mm thickness
Back sheet	Aluminium 22SWG, Riveted & sealed
Glass	4mm, toughened, low iron content with 85% Minimum Transmissivity
Glass Beading/ sealing	EPDM Full length without joints
Grommets	EPDM with inside/outside locking collar
End connection	4mm thick brass flanges with EPDM gaskets
Insulation	48 kg/M³ density Rock wool
Reflective foil	Aliminium 50 microns
Frame Corners	Sealed from inside with Silicone Sealant
Collector Assembly feature	Good finish
(b) ABSORBER ASSEMBLY:	
Coating	Selective, black chrome – NALSUN
	Absorotivity $-96.00 \pm 0.02$
	Emmissivity $-0.12 \pm 0.02$
Bonding between Fin & Raiser	Laser welding
Bonding between Header & Raiser	Metallurgical bonding
Fin	99.9% Copper





Number of fins	09 for 100 LPD & 12 for 150 LPD
Test pressure	5.0 Kg/Cm <sup>2</sup>
Header	99.9% ± 0.01 Copper – 1" x 22 SWG
Riser	99.9% ± 0.01 Copper – ½" x 22 SWG

# ETC GLASS TUBE SPECIFICATIONS

### **HIGH PERFORMANCE GLASS TUBES**

### TECHNICAL SPECIFICATION OF VACUUM TUBE

	Length	1500 mm
1.	Outer tube diameter	47 mm
2.	Inner tube diameter	37 mm
3.	Weight	1.3 Kg
4.	Glass Thickness	1.7 mm
5.	Material	<b>Borosilicate Glass 3.3</b>
6.	Absorptive Coating	Graded A1/N/AL
7.	Vacuum Degree	P < 5*10 - 3 Pa
8.	Thermal Expansion	3.3*10 – 6 C
9.	<b>Insulation Temperature</b>	> 200 C
10.	Absorptions	> 95 %
11.	Emittance	< 5 %
12.	Heat Loss	< 0.8 W/ (M2 C).
13.	Maximum Strength	0.8 Mpa
14.	Lifetime	15 to 20 Yrs
15.	Resist Cold	- 35 C
16.	Resist hailstone	25 mm Q Dia
17.	Resist Wind	30 M/S
18.	Start – up Temperature	<= 20 C

### **FEATURES**

- 1. High quality tubes made form borosilicate glass,
- 2. Withstands high impact from hail storms,
- 3. No clogging or choking,
- 4. Long life,

En 8/9/11



- 5. Inner coating of tubes consists of layers of copper, stainless steel and aluminum nitride,
- 6. Heat water to a very high temperature,
- 7. Availability of hot water even on partially cloudy days,
- 8. 3 Layers Coated Tubes,
- 9. PHOTON Brand.

TANK / AC	CESSORIES SPECIFICATION
Tank:	
Tank Capacity	160 / 125 LPD
Туре	Horizental – @ 1.0 kg / Cm <sup>2</sup>
Tank Material	S.S304
End Fittings	1 1/4" BSP
Tank Insulation:	
Material	P.U.F.
Thickness	55 mm / As required.
Cladding	S.S.
Finish – Shell	Al with sticker
Finish – Dish	Al
Stands For solar collector:	
Material	MS ISA 35 x 35x 4 thick
Finish	Electrostatic Powder coated - PP
Туре	Fixed / demountable as per site
System internal piping: Hot &	Cold
Material	As per design
Size	1 & 1 1/4 as per design
Length	As req at the site
Other Accessories for tanks :	
Air Release Valve	Air vent pipe
Air Supply Valve	As Per Site
Pressure Release Valve	Not Required
Control panel	DTC
Pumps & for internal circulation	1 HP ( Approx)

Thanks and regards

For M/s Photon Energy Systems Ltd.



Mr. Ramamurthy, Manager – Marketing, Mob: 9000 333 767, 99497 61819, 9299 60 4591.

Nogalit