



SOLARWELL

**Sub: EOI-EXPRESSION OF INTEREST FOR PROVIDING AND
INSTALLATION OF SOLAR PRODUCTS**

Dear Sir,

We "SOLARWELL" is the subsidiary of Rockwell Group (established since **1966**) registered as an Exclusive Entity for Alternate Renewable Energy / Solar Energy products and projects in Pakistan.

We are pre-qualified and registered company by AEDB (Alternative Energy Development Board Islamabad) (copy attached).

We, Solarwell-specialists in solar power systems (domestic/industrial), solar submersible/Boost pumps, solar potable lightings, Solar Lantern, Solar Road/Street Lights, Solar Garden Lights, Solar AC's, Solar Geyser, etc.

Solarwell, offers professional services in provision and installation of imported solar products as well as designing of custom-made systems. Solarwell with a foreign collaborations is backed-up by highly experienced and technical staff for after sale services.

By the grace of GOD, our R&D division is capable to design custom-made solar systems and have designed and produced solar road lights, garden lights, flood lights, solar stills, converter/inverter, charge controller and power systems etc.

Our objective is to accomplish our goals, to deliver our services as per our Quality Policy, and execute the jobs in a professional manner. We are attracted to procure challenging/short notice jobs having exposure to the international standards.

Please feel free to contact us for any further information/clarification. Thanking and assuring you of our best professional services at all time, we remain,

Yours truly,
For **SOLARWELL**

SHAHZAD SAEED

Chief Operating Officer



SOLARWELL

SOLAR PRODUCTS



Solar Street Light



Solar Search Light



Solar Garden Light



Solar Lantern



Solar Power System



Solar Water Pump



Subsidiary of Rockwell Group

TABLE OF CONTENTS

- **INTRODUCTION**
- **ORGANIZATIONAL CHART**
- **LIST OF KEY PERSONNEL**
- **PROJECTS EXECUTED**
- **SCOPE OF WORK**
- **SYSTEM LAYOUT DESIGN**
- **SOLAR LED LIGHTS**
- **SOLAR WATER PUMP**
- **SOLAR HOME SYSTEM**
- **SOLAR GEYSER**
- **DATA SHEET P.V.MODULE**
- **DATA SHEET BATTERY**
- **DATA SHEET CHARGE CONTROLLER**
- **PROJECT COMPLETION CERTIFICATE**
- **COPY OF WORK ORDERS**
- **LETTERS OF ASSOCIATION WITH FORIEGN PRINCIPALS**
- **NON LITIGATION CERTIFICATE**
- **CERTIFICATES:**
- **AEDB - PRE-QUALIFICATION CERTIFICATE**
- **AEDB - REGISTRATION CERTIFICATE**
- **GST CERTIFICATE**
- **NTN CERTIFICATE**
- **LCCI CERTIFICATE**
- **BROCHURE**

INTRODUCTION



SOLARWELL

INTRODUCTION

Rockwell Group, the Pakistani-based identity, having five sister concerns working separately under the umbrella of this group, namely:

- Rockwell Corp. (Pvt.) Limited-specialists in geo-technical and foundation engineering, established in 1966, and also rendering its services in civil foundation works. Our piling fleet own 17nos. drilling rigs of different methodologies.
- AQUA~Rock International-specialist in providing and installation of drinking water treatment plants.
- **Solarwell-specialists in solar power systems (domestic/industrial), solar submersible/Boost pumps, solar potable lightings, Solar Lantern, Solar Road/Street Lights, Solar Garden Lights, Solar AC's, Solar Geyser, etc.**
- Scale-professionals in architectural and interior designing works, OEM in custom-made furniture.
- Rockwell Sourcing-textile buying house and exporter of branded knitwear.

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We are pre-qualified and registered company by AEDB (Alternative Energy Development Board Islamabad) (copy attached). Please visit www.rockwellgrp.com for more information.

Solarwell, offers professional services in provision and installation of imported solar products as well as designing of custom-made systems. Solarwell with a foreign collaboration is backed-up by highly experienced and technical staff for after sale services.

We have attached herewith our brochures in shape of CD containing all the desired information for your kind perusal. We are Official Representative and Distributors in Pakistan for M/S SOLARLAND, CHINA, M/S LORENTZ, GERMANY, M/S CHIDEPOT, CHINA and M/S GENERTEC INTERNATIONAL CORPORATION, CHINA with their brand name as "RAISING TECH". The Certificate of Official Sole Distributor in Pakistan and Authorization Letter are also enclosed herewith.

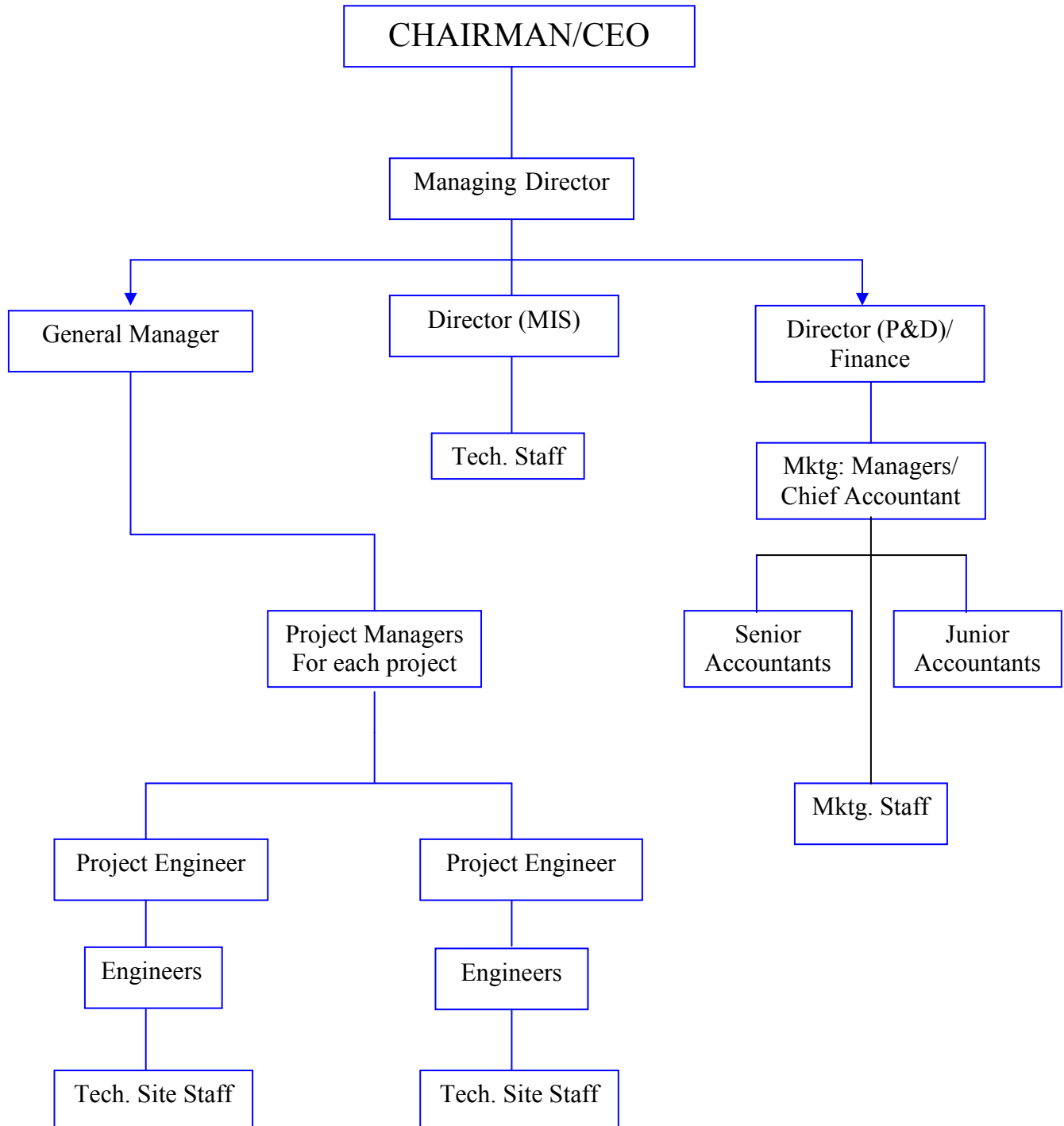
Supervision & Maintenance Back-up: will be provided by SOLARWELL under 42years of experience of **Rockwell Group** including hand-outs of operational manuals and training to the tenants during execution of the Project for proper functioning of all systems.

Our objective is to accomplish our goals, to deliver our services as per our Quality Policy, and execute the jobs in a professional manner. We are attracted to procure challenging/short notice jobs having exposure to the international standards.

ORGANIZATIONAL CHART



ORGANIZATIONAL CHART



LIST OF KEY PERSONNEL



SOLARWELL

LIST OF KEY PERSONNEL

S.No.	NAME & DESIGNATION	QUALIFICATION & EXPERIENCE
1	SAEED IQBAL Chairman	Degree in Geology & Geotech.Engg. Insti. P.M. (London); R.T.C.S. (London); M.A.C.I. (U.S.A.).
2	ATTIQUE SAEED Managing Director	B.Com., M.Sc. (Enggg.Geol.), Dip. Material Engg. C.R.B.C.
3	ASIF SAEED Director (P&D).	B.Com.(Pb); M.B.A. (USA).
4	SHAHZAD SAEED Director (MIS).	B.C.S. M.C.S.
5	RIAZ A. MALIK General Manager	Dip. (Civil Engg); C.S.I. (London); Inst. P.M. (London); R.T.C.S. (London); M.A.C.I. (USA).
6	KHURSHID MUHAMMAD Marketing Manager	MBA 10-Years experience.
7	ADNAN RAO Office Manager	B.A, MBA 8 Years experience in Administration.
8	JAVED KHAN Chief Accountant	B.com 25-Years experience in Accounts.
9	ADNAN KHAN Sr. Accountant	B.com 8-Years experience in Accounts.
10	IJAZ ALI SHEIKH Project Manager	I.C.A Training in U.S.A. 40-Years experience in handling of all types of projects.
11	SYED HUSSAIN JAFFERY Senior Electrical Engineer	B.Sc.(Electrical Engineering) 10-Years experience in all type of electrification design and fitting.
12	MUHAMAD MUZAFFAR Electrical Engineer	B.Sc. (Electrical Engineering). 3-Years experience in all types of electrification design and fitting.
13	MUHAMAD MUNEEB Electrical Engineer	Diploma (Electrical Engineering). 3-Years experience in all types of electrification design and fitting.
14	WAHEED ULLAH Electrician	6-Years experience.
15	SAJJAD ALI Electrician	4-Years experience.
16	TAJAMMAL HUSSAIN Electrician	2-Years experience.

PROJECTS EXECUTED



SOLARWELL

LIST OF SALIENT WORKS EXECUTED

Name of Project	Description	Name of Client
Solar Water Pump	Providing and installation of Solar water pumps, PV. Modules and water storage tanks. Pump will lift water from 350 ft. deep well to store on 1000 gallon tank.	Alternative Energy Development Board (AEDB)-Islamabad
Solar Billboard Light	10 x 20 Billboard size, Providing and installation of PV. Modules, Battery Bank, Controller and 4nos. Solar LEDs lights	Kashmir Road Islamabad
Solar LED Lights	Providing and installation of Solar LED Lights for 10&40ft high poles at Race Course Park, Lahore	EPA-Environment Protection Agency, Lahore
Solar LED Lights	Providing and installation of Solar LED Lights for 15ft high poles	Sapphire Group, Lahore
LED Lights	Providing and installation of LED Lights 220V	Sapphire Group, Lahore
Solar Home system	Providing and installation of Solar Home system for 10 nos. DC bulb, 2nos. DC Fans	Baidian Road Lahore
Solar Home system	Providing and installation of Solar Home system for 15 nos. DC bulb, 4nos. DC Fans	DHA Lahore
Solar Home system	Providing and installation of Solar Home system for 4nos. AC tube lights, 2 nos. AC Ceiling fans	Gulberg, Lahore
Solar Street Light	30Watts solar road light on 5M pole	Gulberg, Lahore
Solar Garden Light	5Watts solar garden light on 1M pole	(OPF) Overseas Pakistan Foundation
Solar Garden Light	5Watts solar garden light on 1M pole	Gulberg, Lahore

By the grace of GOD, our R&D division is capable to design custom-made solar systems and have designed and produced solar road lights, garden lights, flood lights, solar stills, converter/inverter, charge controller and power systems etc.

SCOPE OF WORK



SCOPE OF WORK

Solar Lights

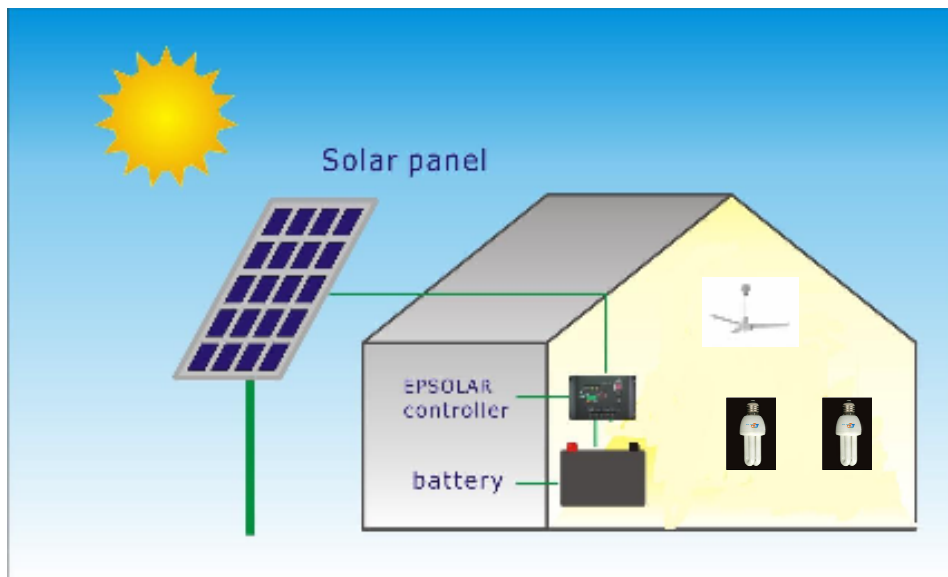
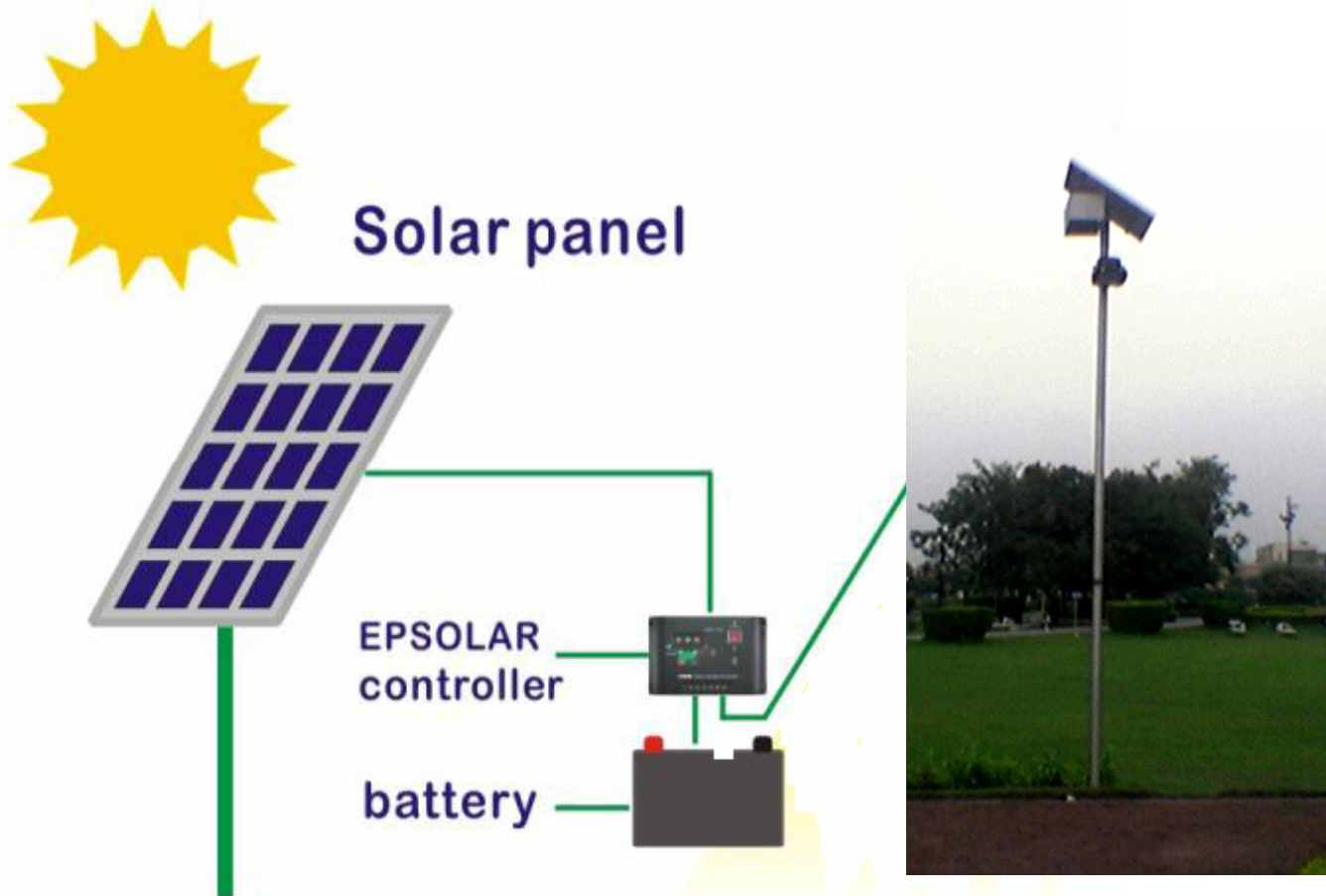
- Providing & Installation of PV Modules, Charge Controllers, Battery Bank, Electric wire, battery box and panel mounting structure.
- Providing all the requisite plant, equipment, and technical staff at each site of work.
- Installation of PV Module mounting structure and PV Modules.
- Installation of Charge Controller and Battery Bank.
- Installation of electric wires and other requisite components.
- Commissioning and operational training at site to the allocated representative during the execution of the project.
- Maintenance Services for one year free of cost (FOC) which includes warranty for proven defect of system's material. All equipment supplied will have warranty seals.
- All components of the panel mounting structure and battery box will be non-corrosive.
- Operational and Maintenance Training will be provided to the allocated representative.

SYSTEM LAYOUT DRAWING



SOLARWELL

SYSTEM LAYOUT DRAWING



LED LIGHTS



SOLARWELL



Solar Lighting

WHY “SOLARWELL” LIGHTS

In many instances lighting at night can be a costly and complicated matter. Issues such as; no available grid power or expensive trenching and cabling requirements can prevent adequate lighting being installed; Damage to the area requiring lighting is also a problem as with conventional lighting systems; footpaths and gardens need to be ripped up to run power cables. Solar streetlights are fully self-contained, so when you choose to install one there are no trenches, no external cabling and no need to connect to the main power grid. With absolutely no power bills and very low maintenance these solar streetlights will pay for themselves.

No Blackout can bring down these lights!

Solar Street Lights are the most cost effective solutions for urban and rural illumination of streets and large compounds/security areas. Even if grid power is available nearby the connection cost it's just much higher than adopting Solar Lights.

Solar Outdoor Area Lighting system is a device that operates using the Light energy available from the sun to provide lighting during nighttime. The Solar PV outdoor lighting is a reliable and an efficient stand-alone system.

The SOLARWELL outdoor area lighting system can be used for roadways, parking lots & other general lighting applications. It is powered by a Solar Photovoltaic Panel and is completely independent from utility power. There is no need to excavate for underground power lines, because the system is powered by clean solar energy.

The energy is generated & utilized at the same place; there are no long distance cables running and hence less transmission losses. You will enjoy freedom from monthly electricity bills as well as satisfaction that comes with owning and operating an environmental friendly, renewable light source.

This fully integrated system combines the latest and the most innovative solar technologies available providing years of convenient trouble free area lighting. Fully assembled, factory tested kits are available to retrofit the most pole mounting applications.

Not only a cost factor Solar Lights are not affected by power blackouts, they are all independent and switch on and off automatically when required.

Solar Lights come with solar modules, controllers, sealed Batteries, galvanized steel box - arm, lighting fixture with lamp screen, complete with LEDs, Cable kit, clamps and fittings for module fixing etc.



SOLAR LED LIGHTS

LED Based Lights

Solarwell is an engineering based company with specialized focus on environment friendly and energy efficient systems. Our engineers can use individual LED to create their combined effect. Different arrangements of LED's in different lights with their specific placement schemes, operating voltages and dispersion angles etc. can light any specific place according to requirement.

LED's (Light Emitting Diodes) are very low in charge consumption, thus requiring low power. A low power LED light can produce much more light than equivalent conventional light.

An LED driver is a self-contained power supply that has outputs matched to the electrical characteristics of your LED or array of LEDs. LED driver support a wide range of LED topologies and control solution for high power LED lighting applications.

The LED's based Lights are available in different wattage and can be designed and produced for specific customer requirements. These lights are categorized on the basis of number of LED's in the light. These lights range to any number of LED's up to 1200 in one fixture.

- **Highest Efficiency Solar PV Module** – Crystalline Solar Module
- **Field adjustable Solar Panel Mount** – can be rotated around 360° with respect to vertical plane and can be tilted from 0 - 45° with respect to Horizontal Plane to obtain maximum light facing the sun.
- **Lighting Fixture** – Aesthetically designed outdoor weatherproof light fixture body.
- **Electronics** are very high efficiency consisting of a LED driver, charge controller & Temperature Compensation for proper charging of the battery irrespective of ambient conditions. The electronics is also provided with overcharge protection, Deep Discharge protection, open circuit & Short circuit protection.
- **Battery** – Battery used is No Maintenance Dry battery specifically designed for solar applications. The battery provides uninterrupted power for dusk to dawn operation or according to client requirement.
- **Battery Enclosure** – A vented, acid proof, corrosion resistant Galvanized battery box is provided.
- **Operation** – Automatic ON/OFF. It can be designed for 2, 4, 6, 8, 10 & 12 Hours operation by providing timer based circuits.
- **Independent Power**
- **No Electricity Bill**

SOLAR WATER PUMPS



SOLARWELL

Why “SOLARWELL” Water Pumping?

Pioneer in introducing LORENTZ water pumps in Pakistan

PS-150C

- lift up to 70 ft
- flow rate up to 1,330 US-Gal./h
- 12-24 V DC nominal voltage

PS-200 HR/C

- lift up to 160 ft
- flow rate up to 720 US-Gal./h
- 24-48 V DC nominal voltage

PS-600 HR/C

- lift up to 580 ft
- flow rate up to 2,930 US-Gal./h
- 48-72 V DC nominal voltage in solar operation
- 48 V DC in battery operation

PS-1200 HR/C

- lift up to 770 ft
- flow rate up to 5,600 US-Gal./h
- 72-96 V DC nominal voltage in solar operation
- 72-96 V DC in battery operation

PS-1800 C

- lift up to 160 ft
- flow rate up to 5,900 US-Gal./h
- 72-96 V DC nominal voltage

Characteristics

- High reliability and life expectancy
- Helical rotor or centrifugal pump, brushless motor
- High resistance to sand and corrosion
- Fits 4" and larger well casings

Application

- Deep well pumping
- Drinking water supply
- Livestock watering
- Irrigation (pressurized and non-pressurized)
- Pond management
- Irrigation





SOLARWELL

A Practical Introduction

If you need to supply water beyond the reach of power lines, then solar power can solve the problem. Photovoltaic powered pumps provide a welcome alternative to fuel-burning engines, windmills, and hand pumps. Thousands of solar pumps are working throughout the world. They produce best during sunny weather, when the need for water is greatest.

How It Works

Photovoltaic (PV) panels produce electricity from sunlight using silicon cells, with no moving parts. They have been mass-produced since 1979. They are so reliable that most manufacturers give a 10-year warranty, and a life expectancy beyond 20 years. They work well in cold or hot weather.

Solar water pumps are specially designed to utilize DC electric power from photovoltaic panels. They must work during low light conditions at reduced power, without stalling or overheating. Low volume pumps use positive displacement (volumetric) mechanisms which seal water in cavities and force it upward. Lift capacity is maintained even while pumping slowly. These mechanisms include diaphragm, vane and piston pumps. These differ from a conventional centrifugal pump that needs to spin fast to work efficiently. Centrifugal pumps are used where higher volumes are required. A surface pump is one that is mounted at ground level. A submersible pump is one that is lowered into the water. Most deep wells use submersible pumps.

A pump controller (current booster) is an electronic device used with most solar pumps. It acts like an automatic transmission, helping the pump to start and not to stall in weak sunlight.

A solar tracker may be used to tilt the PV array as the sun moves across the sky. This increases daily energy gain by as much as 55%. With more hours of peak sun, a smaller pump and power system may be used, thus reducing overall cost. Tracking works best in clear sunny weather. It is less effective in cloudy climates and on short winter days.

Storage is important. Three to ten days' storage may be required, depending on climate and water usage. Most systems use water storage rather than batteries, for simplicity and economy. A float switch can turn the pump off when the water tank fills, to prevent overflow. Compared with windmills, solar pumps are less expensive, and much easier to install and maintain. They provide a more consistent supply of water. They can be installed in valleys and wooded areas where wind exposure is poor. A PV array may be placed some distance away from the pump itself, even several hundred feet (100 m) away.



SOLARWELL

What is it used for

Livestock Watering: Cattle ranchers in the Americas, Australia and Southern Africa are enthusiastic solar pump users. Their water sources are scattered over vast rangeland where power lines are few, and costs of transport and maintenance are high. Some ranchers use solar pumps to distribute water through several miles (over 5 km) of pipe-lines. Others use portable systems,

moving them from one water source to another. **Irrigation:** Solar pumps are used on small farms, orchards, vineyards and gardens. It is most economical to pump PV array-direct (without battery), store water in a tank, and distribute it by gravity flow. Where pressurizing is required, storage batteries stabilize the voltage for consistent flow and distribution, and may eliminate the need for a storage tank. **Domestic Water:** Solar pumps are used for private homes, villages, medical clinics, etc. A water pump can be powered by its own PV array, or by a main system that powers lights and appliances. An elevated storage tank may be used, or a second pump called a booster pump can provide water pressure. Or, the main battery system can provide storage instead of a tank. Rain catchment can supplement solar pumping when sun-shine is scarce. To design a system, it helps to view the whole picture and consider all the resources.

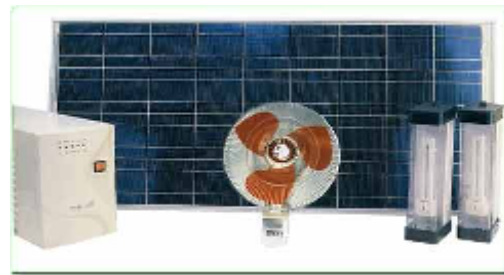
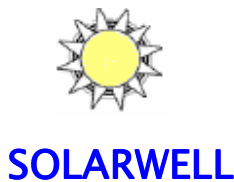
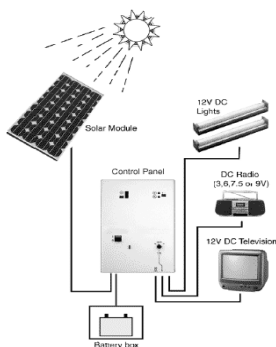
Thinking Small

There are no limits to how large solar pumps can be built. But, they tend to be most competitive in small installations where combustion engines are least economical. The smallest pumps require less than 150 watts, and can lift water from depths exceeding 200 Feet (65 m) at 1.5 gallons (5.7 liters) per minute. You may be surprised by the performance of such a small system. In a 10-hour sunny day it can lift 900 gallons (3400 liters). That's enough to supply several families, or 30 head of cattle, or 40 fruit trees! Slow solar pumping lets us utilize low-yield water sources. It also reduces the cost of long pipelines, since small-sized pipe may be used. The length of piping has little bearing on the energy required to pump, so water can be pushed over great distances at low cost. Small solar pumps may be installed without heavy equipment or special skills. The most effective way to minimize the cost of solar pumping is to minimize water demand through conservation. Drip irrigation, for example, may reduce consumption to less than half that of traditional methods. In homes, low water toilets can reduce total domestic use by half. Water efficiency is a primary consideration in solar pumping economics.

A Careful Design Approach

When a generator or utility mains are present, we use a relatively large pump and turn it on only as needed. With solar pumping, we don't have this luxury. Photovoltaic panels are expensive, so we must size our systems carefully. It is like fitting a suit of clothes; you need all the measurements.

SOLAR HOME SYSTEM



SOLAR HOME SYSTEM

<p><u>PROPOSAL # 01</u></p> <p><u>Solar Home System to run on DC (Direct Current) for:</u></p> <p>2nos. energy saver bulb 7W</p> <ol style="list-style-type: none"> 1. 20W Solar Panel. 2. Charge controller. 3. Maintenance Free 12V, 12Amp (Dry) Battery. 4. Installation cables 25ft. 5. Fittings for module fixing. <p>Charging Time = 1 day Running Time = 4-5 hours</p>	<p><u>PROPOSAL # 02</u></p> <p><u>Solar Home System to run on DC (Direct Current) for:</u></p> <p>2nos. energy saver bulb 7W 1no. DC Table fan 8" blade with emergency inbuilt light.</p> <ol style="list-style-type: none"> 1. 40W Solar Panel. 2. Charge controller. 3. Maintenance Free 12V, 24Amp (Dry) Battery. 4. Installation cables 25ft. 5. Fittings for module fixing. <p>Charging Time = 1 day Running Time = 4- 5 hours</p>
<p><u>PROPOSAL # 03</u></p> <p><u>Solar Home System to run on DC (Direct Current) for:</u></p> <p>2nos. energy saver bulb 7W 1no. DC Table fan 12" blade.</p> <ol style="list-style-type: none"> 1. 75W Solar Panel. 2. Charge controller. 3. Maintenance Free 12V, 40Amp (Dry) Battery. 4. Installation cables 25ft. 5. Fittings for module fixing. <p>Charging Time = 1 day Running Time = 4- 5 hours</p>	<p><u>PROPOSAL # 04</u></p> <p><u>Solar Home System to run on DC (Direct Current) for:</u></p> <p>2nos. DC Energy saving bulb 13W 1no. DC Ceiling Fan (60" blade)</p> <ol style="list-style-type: none"> 1. 75W Solar Panel. 2. Charge controller. 3. Maintenance Free 12V, 40Amp (Dry) Battery. 4. Installation cables 25ft. 5. Fittings for module fixing. <p>Charging Time = 1 day Running Time = 5-6 hours</p>
<p><u>PROPOSAL # 05</u></p> <p><u>Solar Home System to run on DC (Direct Current) for:</u></p> <p>2nos. DC Table fan 8" blade for 12hrs 3nos. energy saver bulb 7W for 8hrs 1no. Mobile phone charger for 2hrs</p> <ol style="list-style-type: none"> 1. 150W Solar Panel. 2. Charge controller. 3. Maintenance Free 12V, 150Amp (Dry) Battery. 4. Installation cables 50ft. 5. Fittings for module fixing. 	<p><u>PROPOSAL # 06</u></p> <p><u>Solar Home System to run on DC (Direct Current) for:</u></p> <p>2nos. DC Table fan 12" blade for 12hrs 3nos. energy saver bulb 10W for 8hrs 1no. Mobile phone charger for 2hrs</p> <ol style="list-style-type: none"> 1. 225W Solar Panel. 2. Charge controller. 3. Maintenance Free 12V, 200Amp (Dry) Battery. 4. Installation cables 50ft. 5. Fittings for module fixing.

SOLAR GEYSER



SOLARWELL

Solar Water Heating Systems

Solar energy is a clean and abundant energy resource that can be used to supplement many of your energy needs. Solar energy can be utilized as a form of heat, such as solar water heating, and as electricity, such as solar photovoltaic.

Water heating is one of the most cost-effective uses of solar energy, providing hot water for showers, dishwashers and clothes washers. Every year, several thousands of new solar water heaters are installed worldwide.



Benefits from Solar Water Heating

- Reliable and durable trouble free performance
- Environmental friendly renewable energy source
- Provides additional hot water storage capacity for your home or business
- Very low to no operating maintenance expense
- Maintain regular hot water supply during electric utility outage

Solar water heaters can also be used in other applications, for example, car washes, hotels and motels, restaurants, swimming pools, and laundry mats.

There are many possible designs for a solar water heater. In general, it consists of three main components:

1. Solar collector, which converts solar radiation into useable heat.
2. Heat exchanger/pump module, which transfers the heat from the solar collector into the potable water.
3. Storage tank to store the solar heated water.

Detailed Product Description

Quantity of Evacuated Glass Tubes:	15
Diameter of Evacuated Glass Tubes:	47mm
Length of Evacuated Glass Tubes:	1.5M
Tank & Evacuated Glass Tubes Capacity:	135 L
Polyurethane Insulation Layer Thickness:	80mm
Inner Tank Material:	SUS 304-B Food Grade Quality
Structure:	Powder Coated Color Steel
Packing:	Standard Packing

PROJECT
COMPLETION
CERTIFICATE



B/3/2/2006


21st February 2007

Mr. Asif Saeed
Director (P&D)
SOLARWELL,
9-T, Gulberg-2,
Lahore.

Subject: **INSTALLATION OF SOLAR WATER PUMPS FOR AEDB
DEVELOPMENT PROJECT IN SINDH**

As part of AEDB's development project titled "Solar Water Pumping and Desalination Systems", seven (7) Solar Water Pumps (Lorentz, PS 600 HR-03-2) of capacity 2500-3000 litres per day were procured and installed by M/s SOLARWELL, Lahore at various remote villages in District Chachro, Sindh from November 2006 to February 2007. These pumps have so far been working successfully.

2. I commend M/s SOLARWELL on a job well done.


(Air Marshal (R) Shahid Hamid)
Chairman

COPY OF WORK ORDERS

LETTERS OF
ASSOCIATION WITH
FOREIGN
PRINCIPALS



your message

your reference

our reference

☛ direct
+49 (0) 4193 7545-0

date
23.03.2008

Alternative Energy Development Board (AEDB),
Government of Pakistan,
Islamabad – Pakistan

Sub: **AUTHORIZED AGENTS FOR PAKISTAN**

This is to certify that M/s Solarwell subsidiary of Rockwell Group having its registered office at 9-T Gulberg 2, Lahore – Pakistan is an Authorized Agent in Pakistan for LORENTZ solar products.

LORENTZ technical expertise are always available to back-up "SOLARWELL".

This authorisation needs to be renewed annually.

LORENTZ
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Dipl. Ing. Bernt Lorenz, CEO

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Dipl.-Ing. Bernt Lorenz
Tax-Ident-No. DE 159 987 510
HRA-KSt 4454

Customer: SOLARWELL" 9-T Gulberg 2, Lahore-Pakistan

Date: 2006-12-04

Attn: Mr.SHAHZAD SAEED

Page:1

Tel: 0092-42-5756301 Fax: 0092-42-5756303

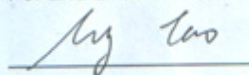
Subject

Letter of Association for "Solar Products" For All Projects

We, M/s SOLARLAND located at Wuxi, China have executed numerous contracts since Year 2004 for solar home system for Government, Semi-Government and Private Sector having International recognition with four departments/agencies.

We, hereby confirm our association with M/s SOLARWELL, a subsidiary of Rockwell Group-Pakistan having its head office at 9-T Gulberg 2, Lahore . M/s SOLARWELL being our "Distributors" for Pakistan region will have our technical expertise and support for all type of Solar products and/or components.

For and or behalf of


Dec. 04. 2006



GENERTEC INTERNATIONAL CORPORATION

CERTIFICATE OF OFFICIAL AUTHORIZED DISTRIBUTOR

Upon the recommendation of the Management Genertec International Corporation,
Hereby Qualifies and Appoint

SOLARWELL
(of Rockwell Group)
9-T, Gulberg-2, Lahore
Pakistan

As a

Official Authorized Sole Distributor for Pakistan with all the Rights, Privileges
and Responsibilities there to pertaining for our all range of products and
exclusively for UPS, INVERTER AND CHARGE CONTROLLER.

GENERTEC INTERNATIONAL CORPORATION

.....
(Authorized Signatory)

GENERTEC INTERNATIONAL CORPORATION

TO WHOM IT MAY CONCERN

AUTHORIZATION LETTER

This letter is to certify that either of Mr. Asif Saeed and Mr. Shahzad Saeed of M/S SOLARWELL is hereby authorized to sign and deal with all type of documentation on behalf of our Company for the Tender submissions; As their Firm stand Authorized Distributor for Pakistan under our Official Certificate issued separately.

Regards,

For Genertec International Corporation

GENERTEC INTERNATIONAL CORPORATION

.....
(Authorized Signatory)

CHIDEPOT CO., LIMITED

302, 2nd Fl. No.2 Building, Mingshi Garden, No.1 Haichuan Road, Qingdao, China Zip code: 266071, Tel/Fax: China (532) 85927510, China (532) 85870985 Email: hz@chidepot.com, www.chidepot.com

Distributorship Agreement

Agreement entered into between CHIDEPOT CO., LIMITED referred to as Party-A and Solarwell in Pakistan referred to as "the Agent" Party-B.

During the effective period of this Agreement, Party-A hereby grants to Party-B the right to sell Products in Territory Pakistan and Party-B accepts and assumes such appointment for the sale and distribution of Products in Territory Pakistan.

The relationship hereby established between Party-A and Party-B, during the effective period of this agreement, shall be solely that of seller and buyer, and Party-B shall under no circumstances be considered to be the legal representative of Party-A and shall have no right or authority to contract in the name of or to create a liability against the Party-A.

However, M/s. Solarwell (Party-B) is an Authorized Distributor of Party-A.

Under this Agreement, Party-A is responsible for the supply of quality workable products to Party-B and as per mutually decided specifications. Party-A being a supplier of solar products will provide backup services up to the satisfaction of Party-B.

Each individual contract under this Agreement shall be confirmed on each transaction and paid 20% of total value by T/T, 80% of total value by irrevocable letter of credit at sight. Both Party-A and Party-B shall from time to time and/or on the request of either party furnish each other with information and market reports to promote the sale of Products as much as possible. Party-B shall give Party-A such reports as inventory, market conditions and other activities of Party-B.

This Agreement shall be valid and remain in force for a period of three years and will be extended if not mutually agreed in writing this Agreement commencing from the date when Party-A receives Party-B's first order.

Neither party shall assign, transfer or otherwise dispose of this Agreement in whole or in part or any right hereunder to any person, firm or corporation without the prior written consent of the other party.

Any notice, request, or other document to be given to a Party under this Agreement shall be in writing and (A) sent by registered or certified mail, postage prepaid, (B) hand delivered, (C) sent by express mail or other overnight delivery service which provides documentation of receipt, or (D) sent by telecopy, telex or telegram, addressed as follows:

Party-A: 302, 2nd Fl. No.2 Building, Mingshi Garden, No.1 Haichuan Road, Qingdao, China Zip code: 266071, Tel/Fax: China (532) 85927510, China (532) 85870985 Email: hz@chidepot.com, www.chidepot.com

Party-B: 9-T, Gulberg-2, Lahore - Pakistan.


Ph: # 092-42-5756301, 5764481, Fax: 092-42-5756303

E-mail: roskwell@brun.net.pk Mr. Shahzad Saeed

Any party may change its address for receiving notices, requests or other documents by giving written notice of its change to the other party.

PARTY-A: CHIDEPOT CO., LIMITED

PARTY-B: SOLARWELL

(Signature)  Berlin Zhang

(Signature)



CERTIFICATES

Alternative Energy Development Board (AEDB)
344, B Prime Minister's Secretariat, Islamabad
Ph: 051-9223427 Fax: 051-9205790



B/5/9/2006

15th April 2006

Mr. Shahzad Saeed
Solar well subsidiary of Rockwell Group
Lahore

Subject: Registration of Solarwell

The firm M/s Solarwell subsidiary of Rockwell Group 9-T Gulberg-2
Lahore has been registered with Alternative Energy Development Board on 10th
April 2006. Its registration no. is AEDB/Solar/256

The firm is technically qualified for supply and installation of Solar
Energy products in Pakistan.

Ahsan Javed
(Technical Coordinator)

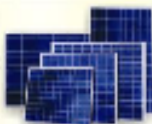
BROCHURE



PHOTOVOLTAIC MODULES

Specifications

- Available Non-surge line 12V 50W to 140W/m²
- Non-surge line 140W to 240W/m² to 150W/m²



Advantages

- Strong light efficiency solar cells
- Polysilicon / Monocrystalline solar modules
- 10-20 years warranty

SOLAR STREET LIGHT

Specifications

- PV Module
- Available in 100W/m²
- Bright white LEDs
- Charge controller
- On-board solar box
- Lighting fixture

Advantages

- Automatic switch (timer)
- Over current protection
- Available in different models with 100W/m² lighting fixture
- Maintenance of low maintenance
- Automatic switching
- Fast and easy installation with portable accessories
- Best solar energy for long-term reliability
- One good year parts defect guarantee with warranty pack



ROBBER LIGHT / GATE LIGHT / CAR PORCH LIGHT

Specifications

- PV Module
- Available in 100W/m²
- Bright white LEDs / Energy saving lamp
- Lighting fixture

Advantages

- Automatic switch (timer)
- Over current protection
- Available in different models with 100W/m² lighting fixture
- Maintenance of low maintenance
- Fast and easy installation with portable accessories
- One good year parts defect guarantee with warranty pack



SOLAR BILLBOARD LIGHT / SEARCH LIGHT WITH MOTION DETECTOR

Specifications

- PV Module
- Available in 100W/m²
- Bright white LEDs / Energy saving lamp
- Charge controller
- On-board solar box
- Lighting fixture

Advantages

- Automatic ON/OFF timer
- Low cost and easy to install with portable accessories
- Fast and easy installation with portable accessories
- One good year parts defect guarantee with warranty pack



Subsidiary of: ROCKWELL GROUP

9-T Gulberg-II, Lahore-Pakistan

Tel: 92-42-5766301 - 5764481

Fax: 92-42-5766303

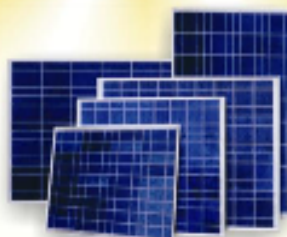
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Web site: www.rockwellgrp.com/solarwell

www.rockwellgrp.com/solarwell

SOLAR ENERGY SOLUTIONS



Quality Technology Innovation



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SOLAR HOME SYSTEM

Specifications

- PV Module
- Multi-channel MPPT battery
- Charge Controller

Advantages

- Provides power for AC / DC appliances
- Cost-effective design
- Develops healthy voltage environment
- Reduces need for generators and other safety issues
- Properly sized & protected
- One good year's solar system operation with warranty work



SOLAR PORTABLE POWER STATION

Specifications

- AC inverter
- Inverter for AC appliances up to 100W
- Built-in 12V 100Ah
- Ampere-hour

Advantages

- Easy to use for frequent loads
- Over-charging & deep discharge
- Protection from fire & explosion
- One good year's solar system operation with warranty work



SOLAR TRACKING SYSTEM

Specifications

- No expansion, no module as a sensor
- Mount on single 8x8" metal rail post hole
- Supply voltage of tracking frame

Advantages

- High reliability and life expectancy
- Low power consumption (up to 120W/yr)
- For stationary tracking system
- One good year's solar system operation with warranty work



SOLAR TRAFFIC LIGHT / SOLAR WARNING LIGHT

Specifications

- PV Module
- Multi-channel MPPT battery
- Remote LED
- Charge Controller

Advantages

- High reliability and life expectancy
- Cost-effective design
- Low power consumption
- Easy to use
- Properly sized & protected
- One good year's solar system operation with warranty work



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SOLAR LANTERN / SOLAR PORTABLE LIGHT

Specifications

- PV Module
- Multi-channel MPPT battery
- Charge Controller

Advantages

- Provides power for AC / DC appliances
- Cost-effective design
- Develops healthy voltage environment
- Reduces need for generators and other safety issues
- Properly sized & protected
- One good year's solar system operation with warranty work



SOLAR SUBMERSIBLE / CENTRIFUGAL WATER PUMP

Specifications

- PV Module
- Multi-channel MPPT battery
- Charge Controller
- Pump (1/2 HP/1000 GPD)

Advantages

- Easy to use for frequent loads
- Over-charging & deep discharge
- Protection from fire & explosion
- One good year's solar system operation with warranty work



SOLAR WATER HEATER

Specifications

- Tank volume (100-200 liter)
- High efficiency of water
- Absorbance 0.3-0.5
- One good year's solar system operation with warranty work

Advantages

- Provides power for AC / DC appliances
- Cost-effective design
- Develops healthy voltage environment
- Reduces need for generators and other safety issues
- Properly sized & protected
- One good year's solar system operation with warranty work



SOLAR COMMERCIAL SYSTEM

Specifications

- PV Module
- Multi-channel MPPT battery
- Charge Controller

Advantages

- Provides power for AC / DC appliances
- Cost-effective design
- Develops healthy voltage environment
- Reduces need for generators and other safety issues
- Properly sized & protected
- One good year's solar system operation with warranty work



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