

DeLight™ Solar Photovoltaic power systems.

"Your independence from electrical utility companies."SM

DeLight™ offers complete solar electric power systems.

Along with services for the easy installation and maintenance at your home or office in Karachi.

Our leading systems provide a safe and reliable source of alternative energy.



Our systems are designed to supply years of maintenance-free operation. Each system comes complete with solar panels, power electronics, mounting frames, UPS, and batteries.

DeLight™ solar electric systems are designed to be installed on to the flat roofs commonly found in

Karachi buildings.

The systems can be installed in buildings which are new or old.

Complete services are available for our solar systems including :

- Installation services
- Periodic check to make sure everything is perfect.
- Preventive maintenance
- Failure maintenance
- Disaster recovery
- Sales
- Demonstrations
- Moving services. Uninstall, transport, and reinstall.

•Custom designing for specific client applications.



How it works.

The sun shines daily for approximately 10 hours. It delivers 1000 to 1350 watts per square meter when directly overhead. The solar cells in the solar panels convert the energy into electrical energy.

This energy is used to charge the batteries. The batteries are connected to a UPS which can be used to power common appliances like mobile phone base stations, modems, computers, lights, refrigerators, fans or whatever you like.

During the day, the power can be used and excess power shall be stored in the batteries. The solution has extra benefits as compared to running a generator.

A solar cell is rated to work for at least 25 years at greater than 80% to 90% of its minimum capacity. At 6 hours

per day, 365 days per year and 25 years it shall work for at least 54750 hours. It does not suddenly die out like other electrical devices like a bulb,



transistor or a fuse but slowly degrades in performance. So you do not have to worry about your investment. 1 watt for 54750 hours is equal to 54.75 KWh. Each KWh is also called a "unit" in Karachi.

You can calculate the cost of a KWh by dividing your total monthly bill by the number of units used according to the meter. This shall give you a cost of approximately Rs 10 per watt. More if you are an industrial user and less if you are a residential user with minimal consumption.



Based on Rs 10 per KWh, a 1 watt solar cell is going to generate 54.75 KWh over 25 years and more if it is left to do so cells have a durability of up to 40 years. So maybe we might be able to get 60 to 70 KWh practically over a longer period of time.

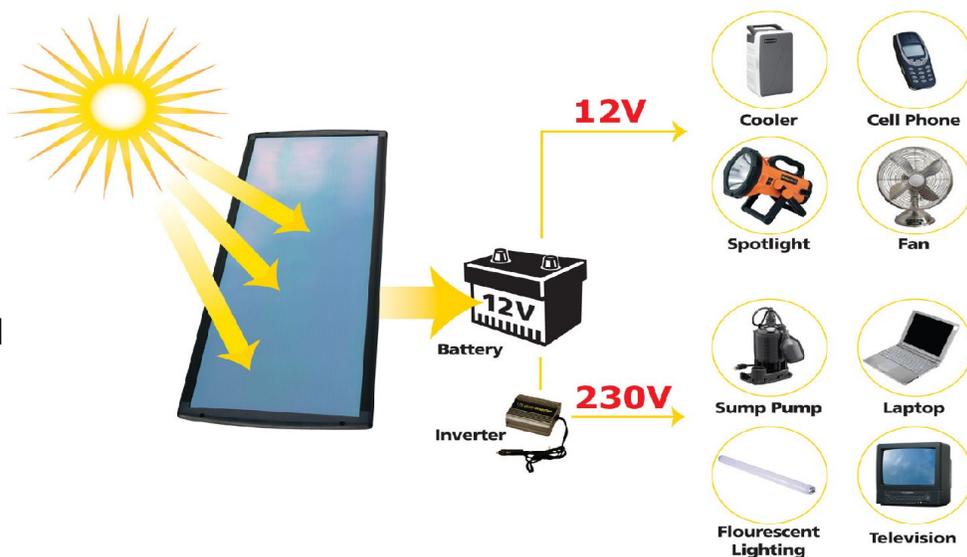
The 54.75 units are worth Rs 547.50 based on current prices.

At Rs 360 per watt for solar panels, the cost of generated electricity by solar is about half of the KESC cost.

The price of the batteries, UPS and other equipment is the same for both KESC and solar.

This offers a lower than utility cost solution.

How Solar Works



Other advantages of our solar power system include :

- Noiseless operation. The loudest item is an inverter.
- No smoke.
- No diesel or petrol to store.
- Totally automatic operation.
- No switching required.
- Reduced or no electricity bill.
- No worries of power failure when you have friends or customers to deal with.
- No accidental and deliberate feeling the need to swear at the utility company.
- No electricity bill and no disconnections worries and non a completely independent system.
- Earlier return on investment if the cost goes up. Very likely based on trends.
- You look smarter having higher technology than having to request you assistant to turn on the noisy and smelly generator.



For any queries or questions you have regarding this product. Please feel free to call, SMS or email anytime.

Solar panels and complete battery charging systems from DeLight™

Solar cells and panels.

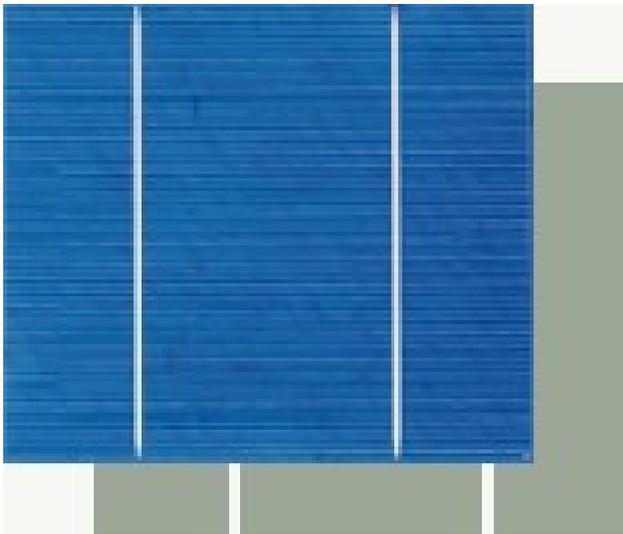
Solar panels from 5 Watts to 300 Watts.

Solar cells : Q-Cell Germany Q6LTT-1440 Solar cells 3.5 Watts.

http://atrc.net.pk/products/energy/solar/cells/qcells/Q6LTT_HP_Feb09_007_Engl.pdf

Email for details of prices : delight@atrc.net.pk

http://www.q-cells.com/en/products_services/solar_cells/q6ltt/index.html



The acid texturised Q6LTT solar cell with an edge length of 156 mm differs fundamentally from the successful Q6L cells in visual terms. Although multicrystalline raw material is still being used, its structure has almost become invisible. The new surface ensures improved light absorption. Compared to the previous cell design, this means an efficiency increase of more than 4 % without reducing the Q-Cells profit power. Furthermore, the Q6LTT has a decreased Hot-Spot-Risk and stands for higher mechanical stability when the cell is processed into a module.

- **Q6LTT**
MULTICRYSTALLINE CELLS

Product data sheet Q6LTT

[Download as PDF, 876 KB](#)

Mechanical parameters

Format:	156 x 156 mm
Efficiency:	≥ 14.10 %
Product category:	high performance
Available Performance Categories:	Q6LTT-1410, Q6LTT-1440, Q6LTT-1460, Q6LTT-1480, Q6LTT-1500, Q6LTT-1520, Q6LTT-1540, Q6LTT-1560, Q6LTT-1580, Q6LTT-1600, Q6LTT-1620, Q6LTT-1640



DeLight™ Solar Power Systems, Karachi, Pakistan

Contact :

Khawar Nehal

Mobile : 92-333-2486216

Office : 92-21-38180991

Email : delight@atrc.net.pk