



# The Power of Innovation

## New Solar Energy Solutions Coming Soon

For more than 45 years, Sharp has led the solar energy revolution with practical, efficient and affordable solar electric systems. As the #1 manufacturer of solar cells in the world, Sharp remains fully-committed to meeting the increasing demand for solar energy, with new production lines opening in both the U.S. and Japan in 2004.

We're also committed to the development of powerful new technologies and innovative products that open entirely new applications in solar energy. Products like our next-generation 200 Watt module and attractive solar rooftiles will soon come to market. Innovations such as our Solar-Powered Street Lamp and LumiWall illuminating solar panel combine solar cells with LED illumination. And new technologies like thin film flexible cells and our light concentration module hold great promise for the future.

That's just what you'd expect from Sharp, the world leader in Solar.

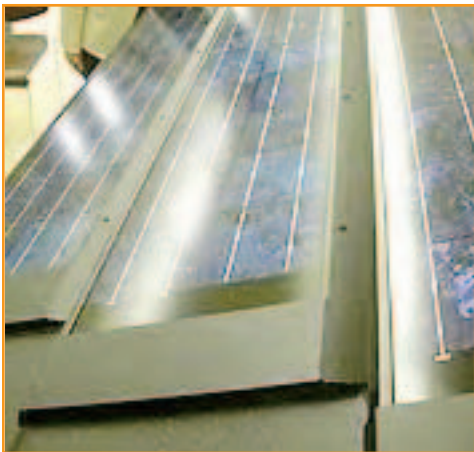


NEW PRODUCTS

# Solar Rooftiles

EFFICIENT INSTALLATION MEETS GREATER POWER OUTPUT.

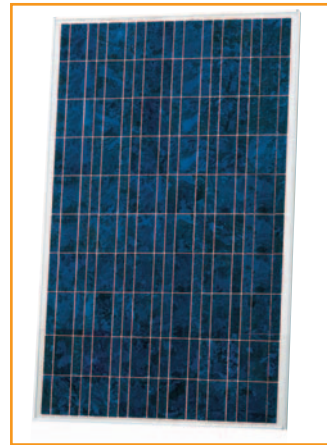
These building-integrated photovoltaic (BIPV) modules are an exciting option for residential roofing, both for new construction or refurbished roofs. Because Sharp's Solar Rooftiles lay flatter on the rooftop, the aesthetics of the home are never compromised. These modules replace existing roofing materials – with no roof penetration necessary – and integrate smoothly by interlocking with traditional roof tiles. Plus, their use of proprietary textured glass helps lead to the highest conversion efficiency of any commercially available solar module.



## 200 Watt Module

NEXT GENERATION. BREAKTHROUGH PERFORMANCE.

Ideal for large industrial applications, this high-powered new module represents the next step up in power from Sharp's existing modules. It's also easy to install and can be used for a wide range of applications. An outstanding balance of size and weight to power and performance allows for maximum power output using limited space.



Maximum Output: 200W

Cell type: Poly-crystalline silicon

No. of cells: 60 cells in series

Dimensions: 64.6" x 39.1" x 1.8"

Conversion efficiency: 12.6%

Weight: 50 lbs.

## Light Concentration Module

FOCUSED ENERGY. EXCEPTIONAL EFFICIENCY.

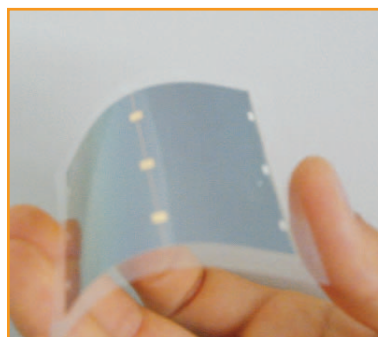
Solidly mounted on a sophisticated tracking system, this next-generation module is built for maximum sun exposure and is ideal for large power plants and other applications. Its concentrator lenses are engineered to focus sunlight on the underlying PV cell to help deliver an exceptional cell efficiency of over 40%. Moreover, high conversion efficiency is further boosted by its aluminum heat sink which ensures cool operation.



## Thin Film Flexible Cell

HIGH EFFICIENCY. LIGHTWEIGHT.

Sharp's powerful commitment to innovation continues with this inventive Thin Film Flexible Cell. Lightweight and fully-adaptable, this breakthrough technology promises efficiencies of an incredible 28% or more.

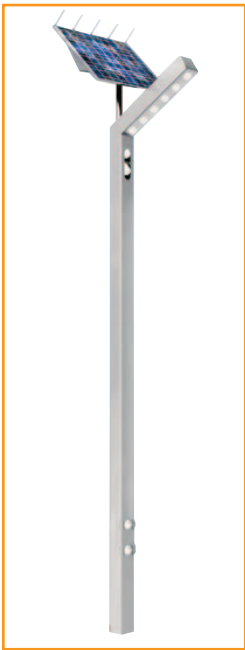




Sharp offers yet another solar industry innovation—lighting that combines solar cells with LEDs. These two new products reach the environmentally-conscious goals of creating renewable energy and saving energy using mercury-free LEDs. This new generation of lighting products could only come from Sharp.

## Solar-Powered Street Lamp

SELF-CONTAINED STREET LIGHTING ALTERNATIVE.



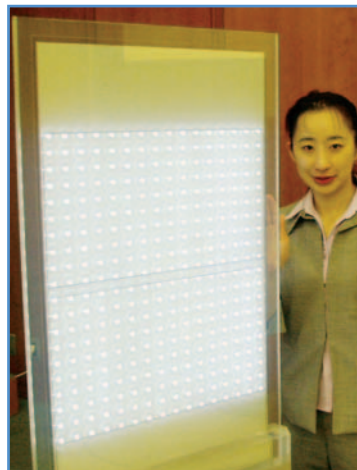
Offering plenty of brightness but consuming only 10W of power, Sharp's groundbreaking Solar-Powered Street Lamp requires no electric construction, wiring or power cables. Sleek and elegant with a beautiful luster, its brushed stainless steel body is corrosion-resistant. Mounted inside the pole, concealed behind its stylish design, is the secondary battery and control circuitry. The ultimate in ease and immediacy, the lamp can be installed in a single day. Moreover, as it generates its own electrical power, the Solar-Powered Street Lamp continues to operate even during power interruptions or failures resulting from natural disasters. Sharp's next-generation Solar-Powered Street Lamps—intelligent innovation.

- Cell type: Polycrystalline
- Nominal power output: 34.3 W
- Upright Pole Material: Stainless steel
- Maximum height: 12'2" above ground
- Weight: Approx. 165 lbs.

## LumiWall Illuminating Solar Panel

NATURAL LIGHT BY DAY. LEDs BY NIGHT.

A combination of thin-film solar modules and integrated LEDs, the LumiWall is yet another Sharp innovation. With no power supply needed, Sharp's proprietary illuminating solar panel integrates power generation, daylight transmission and self-illumination functions into one single module. During the daytime, solar cells generate and batteries store electricity while natural light from the sun is allowed to pass through. At nighttime, LEDs embedded in the same panel provide illumination which, when used in combination with sensor light, make it suitable as a crime-prevention light.



- Cell type: Crystalline, thin-film
- Nominal power: 35 W
- Illumination: High-intensity white LEDs
- Dimensions: 24" x 39" x .6"
- Weight: 48 lbs.

Preliminary specifications and design subject to change without notice.

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