

# Here Comes the Sun

Solar products  
that rise to the occasion.

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**E**XPENSIVE. HARD TO USE. A POOR substitute for conventionally powered products. Only two years ago, if you asked consumers or interior designers what they thought about solar power and solar-powered devices, those are the words they would probably have used. Solar power for homes was clunky and extremely costly, while solar-powered technology used in pool heaters, outdoor lighting and video cameras was lackluster at best. Solar batteries did not hold charges long, and lighting was dim and cold.

Today, however, there has been a revolution in the solar industry. Manufacturers have reduced costs, while quality has improved. The sun is definitely shining when it comes to this pollution-free alternative power source, says Jason Root, vice president of merchandising and operations for Smarthome, a home improvement and automation manufacturer and retailer based in Irvine, Calif.

"We're constantly looking to add anything that's solar," he explains. "The number of products available and the demand have tripled over the past year. It has even led to our creating a separate category on our site—Energy Savers—which joins other categories like Audio, Home Theater and Lighting Control."

## Safe and Solar

Consider Smarthome's 2.4GHz Solar Color PIR (Passive Infrared) Camera & Receiver (\$159.99), which is truly wireless. It receives its power from the sun and transmits data to a television or VCR. In the past, wireless security cameras were not truly so, because they still needed a power source. The Smarthome offering allows homeowners to put their camera anywhere it has access to the sun and view what is going on in 10-, 20-, 30- or 40-second increments. A 9-volt battery is included just in case sun is scarce, while a motion sensor option minimizes the chance that you will actually need it.

Solarbeam Security, based in Homestead, Fla., has also added products to its lineup. The company recently introduced its Solarbeam SPT2000 Perimeter Security System, which is designed to cover every corner of a property and send reports of breaches using a photoelectric beam and a wireless communication system. The system, which can also be set up with closed-circuit video cameras, has a range of up to five miles from transmitter to command unit. If the system is tripped, you can receive notification via telephone, pager, handheld radio or your existing security system.

"We try and create an environment that lets you have



Top: The wireless PIR solar security camera and receiver from Smarthome. Above: Solarbeam's SPT2000 Perimeter Security System.

an invisible wall that cats, dogs and birds can go through, but intruders can't," explains Bob Houston, the company's president and CEO. The cost, he says, is between \$18,000 and \$20,000 for a 10-acre property.

Not surprisingly, lighting to support solar security cameras is not tethered anymore either. Smarthome, along with a growing number of retailers, sells a wide variety of solar products, including security lights, pool filters and heaters, spotlights, decorative step stones, lighted house numbers, umbrellas and tiki torches.

The appeal is multifaceted, says David Hughes, the technical editor of *The Complete Idiot's Guide to Solar Power for Your Home*. People like the hip factor of these items, and become hooked on the convenience. And then there is the cost savings, he says.

"Look at pool systems, which have always been popular, even when they were much more expensive," says Hughes, who is also the president of Affordable Solar Group, a solar energy system consultant and retailer based in Albuquerque. "They have very fast payback. Someone with a gas heater can expect a solar system to pay for itself in one to two seasons from the savings of not buying natural gas.

You're going to be swimming a month earlier and a month later than normal without paying for it."

And now that solar-powered batteries can hold charges overnight, the resulting landscape and decorative lighting offerings are even more appealing, especially since manufacturers are adding extra LED lights. Older products typically had one LED, which was not as bright as a traditional wired light. Form factors have also changed. Stepping stones with built-in panels and lights create bright walkways, while tiki torches and floodlights help create ambience in the yard without the need for digging trenches or using other, sometimes dangerous, fuel sources.

### It's All Personal

But experts say the real promise of solar power, at least for some busy executives, is its application in personal technology devices. While that promise has always been there—solar pocket calculators are reliable and easy to use—only recently have manufacturers been able to harness enough energy to power more sophisticated equipment. The result is solar-powered backpacks, fishing totes, messenger bags and radio visors that are light enough to carry around, yet powerful enough to be useful.

For example, Solar Style in Baltimore recently intro-

duced a solar charger designed for cell phones and small handheld devices, such as MP3 players, digital cameras and video games. The company's Sun Kit looks like a flip phone with solar panels where the buttons and screen would be.

Randy Gray, founder and president of Eclipse Solar Gear, which manufactures solar messenger bags (\$189.95) and fishing tackle boxes (\$145.95), says we are seeing an upswing in handheld solar chargers because people are tired of carrying around multiple chargers for all their devices, and solar panels are finally thin enough and sturdy enough to get bounced around a bit but still work.

"There are just so many applications now where solar can come into play," explains Gray, who plans on introducing a solar-powered satellite radio receiver at the beginning of 2007. "When you think about it, everyone is carrying around something, and with people traveling more and on the go all the time, solar power lets them charge their devices wherever they happen to be."

Solar carry bags, like The Reactor Solar Backpack from Eclipse, have a series of blue-hued solar panels where you might expect a pocket. To charge a device, you simply plug it into the 12-volt charging adapter. It takes four to six hours to completely charge a dead cell phone battery, which is why laptop chargers have been slow to emerge. Still, some manufacturers, such as Sunshine Solar and Sierra Solar Systems, based in the United Kingdom and Grass Valley, Calif., respectively, are even working on that application. And this is only the beginning, says Hughes.

"The solar industry has been growing exponentially each year for the last six years—the rate doubles every two years," he explains. "People just like the idea of being in control of their own power source." ☐

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Solar Style's Sun Kit charger



Eclipse's The Reactor Solar Backpack