

## Overview

Amonix Inc. is the leading manufacturer of high concentration photovoltaic (HCPV) solar power generators for utility scale solar installations. Amonix's proprietary HCPV generators are transforming the solar power industry by offering significant cost, performance, and deployment advantages compared to traditional solar electric power generation technologies for utility scale applications.

Since its inception in 1989, Amonix has been a recognized leader in the HCPV market and has consistently enhanced its technology since its first HCPV system field deployment in 1994. Today, its proprietary product has been field-proven in nearly 13MW of commercial deployments at a dozen sites around the world.

Through funding from a leading investment firm and a highly regarded award from the U.S. Department of Energy's Solar America Initiative, Amonix has built a major HCPV manufacturing facility to fulfill rapidly growing market demand. With locations in Torrance and Seal Beach, CA, Amonix has a highly talented team of technologists and executives and is growing its workforce.



## Products and Markets

Amonix's high concentration photovoltaic (HCPV) technology uniquely addresses the growing global demand for utility scale renewable power generation. The company's newest product, the Amonix 7700 Solar Power Generator, optimizes the process of deploying a utility scale solar installation, achieves maximum system performance and reliability, and delivers industry-leading levelized cost of energy (LCOE).



*Amonix 7700 in Las Vegas NV*

The Amonix 7700 uses lenses to concentrate sunlight onto the solar industry's highest-efficiency multijunction solar cells, making it the first commercial photovoltaic system capable of converting a quarter of the sun's energy into usable electricity. Producing over 53kW of AC power output, the 72' wide and 50' tall Amonix 7700 Solar Power Generator is the world's largest and most powerful solar system and achieves AC efficiencies exceeding 25%, post-inverter.

The Amonix 7700 offers developers a scalable solution optimized for utility scale deployment and is capable of addressing project sizes from 100's of kW to over 100MW. Leveraging over 15 years of rigorous field-testing in utility environments, the 7700 product is proven and reliable. The design also enables the solar cells to be field repairable and upgradable, further minimizing project risk and increasing service life. The Amonix 7700 HCPV system reaches levelized cost of energy (LCOE) levels below that of competing solar technologies.

## Advantages of the Amonix 7700 Solar Power Generator

<b>Low Cost</b>	Uses lenses to focus sunlight onto very small solar cells, substantially reducing the amount of expensive solar cell material required.
<b>Generates More Energy</b>	Delivers the highest energy production per acre, two to three times greater than competing solar technologies.
<b>Reliable and Field Proven</b>	With nearly 13 MW of Amonix technology installed worldwide, the Amonix 7700 leverages over 15 years of field operation experience.
<b>Scalable Deployment</b>	Deployable in increments of 53kW (AC) and applicable to both distributed generation and centralized solar farms.
<b>Rapid Installation</b>	Modular and factory assembled in MegaModules <sup>®</sup> units which are shipped to the field for installation, reducing construction time.
<b>Uses Less Land</b>	Just five acres per MW of rated capacity.
<b>Performance in Hot Climates</b>	Significantly lower temperature coefficient than conventional silicon PV and thin film PV.
<b>Field Upgradable Solar Cells</b>	Individual solar cells are field replaceable and easily upgradable.

## Installation Highlights



240kW - Southern NV Water Authority  
Henderson, NV



7.8MW - Parque Solares de Navarra  
Navarra, Spain



1MW - Energías del Tiétar  
Extremadura, Spain



75kW - NV Energy Clark Station  
Las Vegas, NV

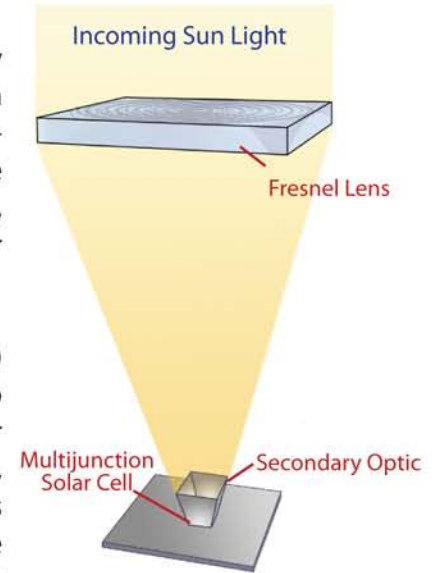


175kW - Arizona Public Service  
Prescott, AZ

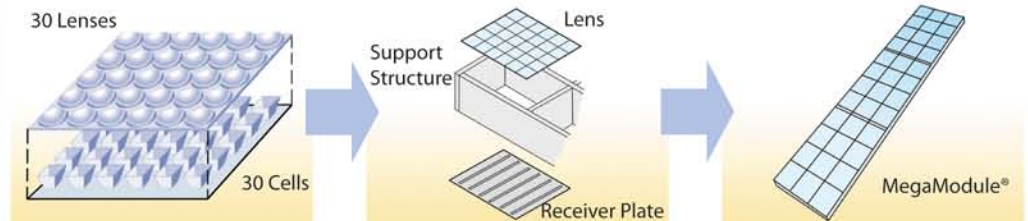
## Amonix Technology Overview

Concentrating photovoltaic (CPV) technology uses optics to focus sunlight onto a small area with the basic premise of substituting inexpensive plastic lenses or mirrors to reduce the amount of expensive solar cell material required, thereby lowering the overall cost of the solar power system.

Amonix high concentration photovoltaic (HCPV) technology uses refractive Fresnel lenses to focus sunlight 500 times onto multijunction solar cells. With efficiencies today approaching 40%, multijunction solar cells are the solar industry's highest efficiency because they generate electricity from a broader portion of the light spectrum. Multijunction solar cells also have an inherently lower temperature coefficient which enables them to maintain performance at high ambient temperatures.



## MegaModule® Assembly



The Amonix 7700 system design aligns the solar cell and Fresnel lens pairs into a proprietary integrated module design called a MegaModule® which is factory assembled and shipped to the field for installation, reducing construction time. The Amonix 7700 system is comprised of seven MegaModules® mounted to a proprietary hydraulic drive tracking structure.

## 2-Axis Tracking



To maintain the sun's focus on the solar cell, the Amonix 7700 uses 2-axis tracking to follow the sun from dawn to dusk. This cost-effective, integrated tracking provides numerous advantages: the system generates close to peak power output throughout the day and produces more energy better matched to the utility demand curve. Amonix HCPV systems generate over 45% more energy per rated capacity than conventional fixed tilt solar panels in sunny locations like the desert southwest.

**Let Amonix power your solar project!**