



Unmatched Performance



AnyLight™ Technology



Designed to Fit



World Record Efficiency: 28.8% and 31.6%

Solar Power for Consumer Devices

The Power Problem

Operating forever is a goal for designers of consumer electronics everywhere. Batteries alone cannot enable continuous operations. As a result, renewable energy sources, such as solar, are needed to achieve multiple week and month operation. The optimal weight and power of Alta Devices' solar solution allow devices to maintain their form factor while operating for much longer, perhaps even indefinitely, without a charge. Designers seek to achieve the greatest packing density with the lowest weight. Alta Devices technology maximizes both benefits.

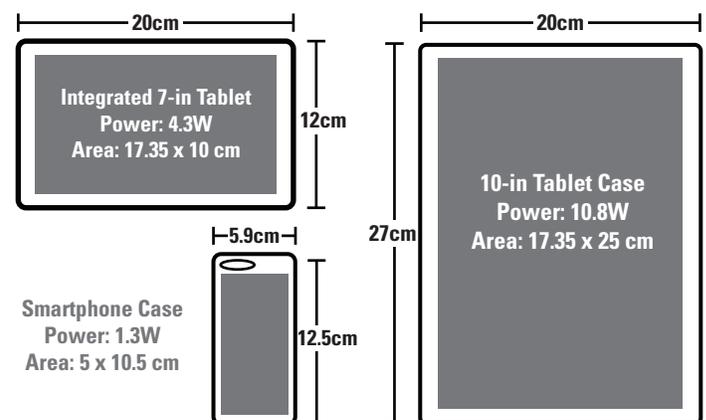
The Solar Solution

Solar power technology has improved dramatically over the years. Efficiency has gone up, but the existing technology is still too heavy, too rigid, or too inefficient for use on consumer electronics — until now. Alta Devices has developed an extremely lightweight, flexible, and thin, gallium arsenide (GaAs) solar cell that holds the single and dual junction world record efficiencies at 28.8% and 31.6% respectively.

System Options

Encapsulation	Flexible polymer, glass or custom
Output	Direct to battery, USB, or external battery
Power Conditioning	Direct DC, MPPT, or battery charge management

Sample Products



Solar Power for Consumer Devices

The Benefits

Alta Devices solar cells offer an exceptional combination of high efficiency, flexibility, thinness and low weight. The high efficiency material permits greater power from a smaller surface area. Alta Devices cells can power your devices longer than other solar technologies. Our solar cells can be easily and directly designed into your final product by molding the highly flexible material around curved surfaces.

Superior Low Light Performance

Unlike most solar technologies, Alta Devices' Anylight technology can harvest energy from indoor lighting. Typically indoor/artificial lighting does not produce the full light spectrum that is present in sunlight; so there is substantially less energy present. However, even in very dim lighting such as in a warehouse (ie. 200 lux) hundreds of microwatts can still be harvested via a single Alta Devices solar cell to extend the life of a primary battery.

Designed to Fit

Alta Devices solar cells are highly customizable and can be tailored to your product's electrical and physical needs. If your product requires a custom solar solution, please contact us to discuss your specific needs. High energy density and lightweight flexible structure allows for integrated mobile power generation in a wide variety of devices.

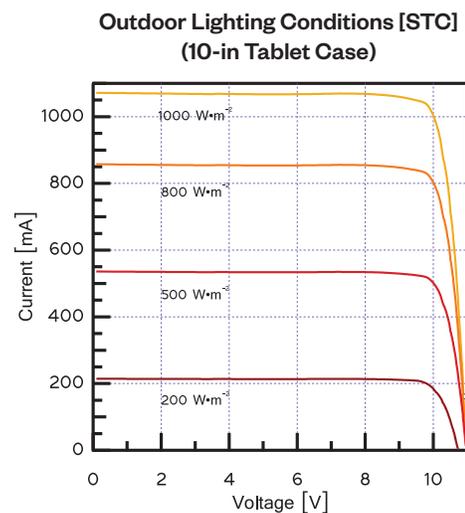
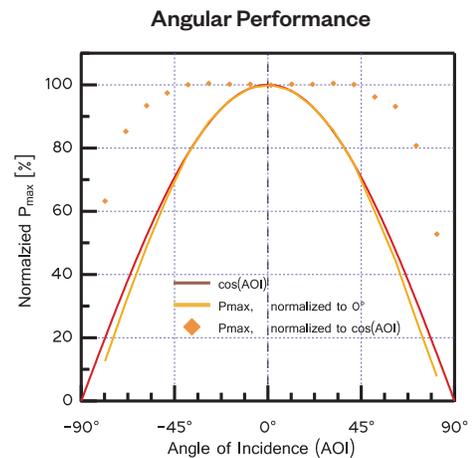
- The cells are extremely thin, flexible and lightweight
- A wide variety of encapsulation methods allow integration into existing products
- World-record cell and module efficiencies
- Absorption is well matched to indoor lighting

Electrical Specifications

Performance in Real World Environments

		10"	7"	Phone
Indirect Sun	W	5.35	2.13	0.64
Window Sill	W	2.05	0.82	0.25
Near Window	W	0.99	0.40	0.12

Electrical Performance



Teamwork

Our highly skilled and knowledgeable team of application engineers works closely with each customer, providing technical support from beginning to end of each project to ensure our customer's needs are met. Email us at info@altadevices.com