

# Are you ready to enhance your home and your lifestyle?

Your home is as unique as you are. It is not just walls and a roof, but an ever-changing environment that is entirely special to you. It is where you work, play, relax and spend time with your family. It is not just where you live, but **how** you live.

Our lives are fast-paced, which is why we need innovative ways to help us live smarter, healthier and more eco-friendly. With the right technology, we can simplify our way of life, enjoy the moments that matter most and live the way we want.

With sonnen, you will enjoy a smart, clean energy management system that adapts and changes with your daily lifestyle. It is not just a battery, but an *investment* in your home. It is intelligent, adaptive and reactive. It is seamless and intuitive. It is sleek and unobtrusive, yet *there when you need it most*. It is cutting-edge. It is safe. It is something you may not know you need, yet won't be able to live without.

It is a *lifestyle*. It is sonnen.





## The sonnen Difference

At sonnen, we take pride in delivering a solution that not only provides the quality you expect, but also unique values and our manufacturer's guarantee that you can rely on.

## Unique Values that Define an Industry Leader

**1.** A History of Global Leadership - Founded in 2010 by Christoph Ostermann and Torsten Stiefenhofer in Wildpoldsried, Germany, sonnen introduced the *world's first* intelligent energy management and storage system. With **35,000+ installations** *worldwide*, we have an extensive history of innovating high-quality products that maximize clean and renewable energy.

2. Product Superiority - Using a superior lithium-ion iron phosphate battery chemistry, our product is proven as the **safest**, **longest-lasting**, and **most eco-friendly** all-in-one residential energy storage solution on the market. In fact, sonnen systems are guaranteed to last a minimum of 10 years/10,000 cycles and also offer an overall lifespan that is 8 to 13 times longer than other typical residential energy storage solutions.

**3.** sonnenCommunity - We offer the world's first and only solution of its kind – a clean energy **Virtual Power Plant** that enables you and your neighbors to join together, share energy and be part of a sustainable, clean energy future.

**4.** Advancing Innovation - Introducing *ecoLinx* — the first and only intelligent energy management and storage solution that integrates with leading home automation systems, taking your "clean tech" smart home to a whole new level.

**5.** Giving Back to Those in Need - To further our mission of clean and affordable energy for all, we partnered with the *del Sol Foundation for Energy Security* – a non-profit organization dedicated to providing *relief and recovery* to those suffering from power outages due to climate disaster.

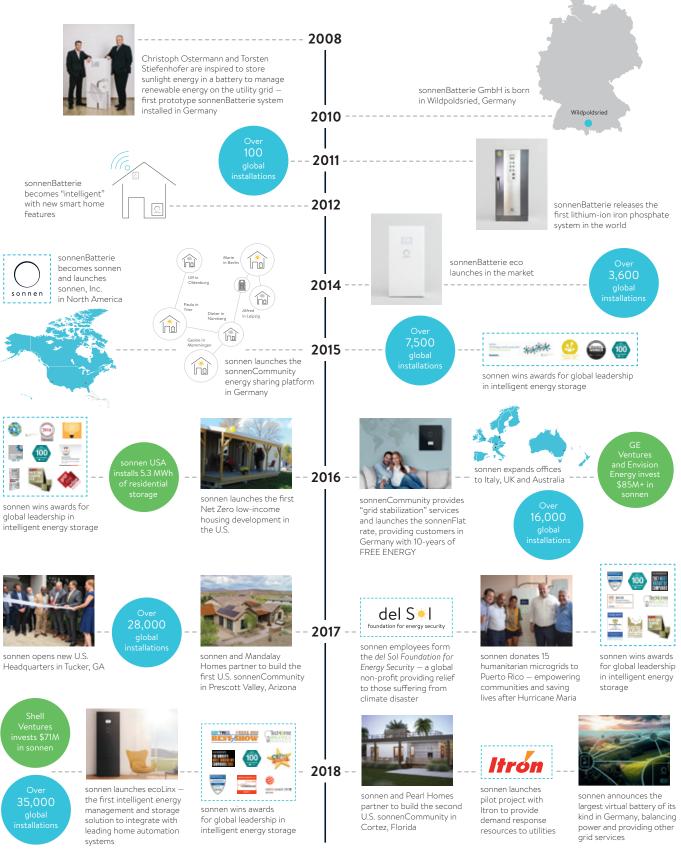
**6.** Partners You Can Count On - We take quality very seriously, which is why we only offer our product through high-quality partners who are trained to design and install systems that enhance your eco-friendly lifestyle.



sonnen eco

## A History of Global Leadership

As the world leader in residential energy storage, sonnen offers a long history of innovation with a proven track record of high-quality products that set us apart from all other solutions on the market.



#### Distinguished Awards, Global Recognition

As the global leader in residential energy management solutions, sonnen received numerous awards and special recognition over the past several years for product innovation and company growth, making it one of the most sought-after products on the market.



Christoph Ostermann, sonnen Co-Founder and CEO, receiving the Zayed Future Energy Award

#### Zayed Future Energy Award

The "Oscars" of energy celebrates companies with impact, innovation, long-term vision and leadership in renewable energy and sustainability. In 2017, sonnen was the first energy storage company to be awarded this prize in the "Small to Medium Business" category.

#### **MIT 50 Smartest Companies**

In 2016, Massachusetts Institute of Technology (MIT) named sonnen as one of the "Top 50 Smartest Companies" worldwide for innovative technology and an efficient business model.

#### TecHome Brilliance Award

sonnen won "Best Overall Product" in 2018 and the "Best Energy Storage Product" in 2017 for creating the intelligent, carbon-neutral home of the future and sonnenCommunity USA.

#### Fast Company's World's Most Innovative Companies

In 2017 and 2018, sonnen was named as one of the 10 most innovative energy companies in the world for our "game changing" impact on the energy sector.

#### **Global Cleantech 100**

Since 2015, sonnen has continuously won awards for "Continued Excellence" each year as one of the most innovative and promising companies that is significantly impacting the energy industry as well as tomorrow's clean technology challenges.

#### **Financial Times Fastest Growing Companies**

In 2017, sonnen was selected as one of Europe's top 1,000 fastest growing companies, out of tens of thousands of companies, by the Financial Times.

#### Grid Edge

In 2016, sonnen won Greentech Media's award for companies and projects that incorporate distributed energy resources and other emerging trends, leading the change in centralized, unidirectional electricity delivery.

#### Hive 50

In 2018, sonnen and Mandalay Homes received an award for "Top Innovation in Building Technology" for their transformative, sonnen-powered 2,900-home clean energy community in Arizona.

#### **CEPro BEST**

sonnen received this prestigious award in the "Energy Management" category at CEDIA 2018 for the Energy Automation with ecoLinx product. This award offers an incredible glimpse into the future for the home automation industry and how it will take the ultimate smart home to the next level with intelligent energy storage and management.

#### Deloitte Technology Fast 50 Companies

In 2015 and 2016, Deloitte named sonnen as one of the 10 fastest-growing companies in Germany, with a 576% growth rate over the past 4 years.





















## Product Superiority

**sonnen does one thing, and we do it well**. We design high-quality, residential energy storage systems that complement any photovoltaic (PV) solar solution to maximize the use of clean energy.



**Hassle-Free.** The "smart" system automatically monitors and adjusts as needed — so you don't need to worry about a thing.



**Mobile Monitoring.** With the sonnenApp and web portal, you can monitor and manage your energy usage while at home or away.



**360 Quality Guarantee.** Each unit is handcrafted, designed and engineered in the USA with 360-degree quality manufacturing and testing.



Safety and Longevity for Peace of Mind. You will rest assured knowing that you have the safest, longest-lasting intelligent energy storage solution in the industry.



**Continuous Innovation.** We invest heavily in R&D to ensure that we develop and deliver the most cutting-edge technology on the market.



**Minimal Environmental Impact.** Batteries are made of eco-friendly products (95% fully recyclable). Product longevity also eliminates the need to regularly discard and replace.

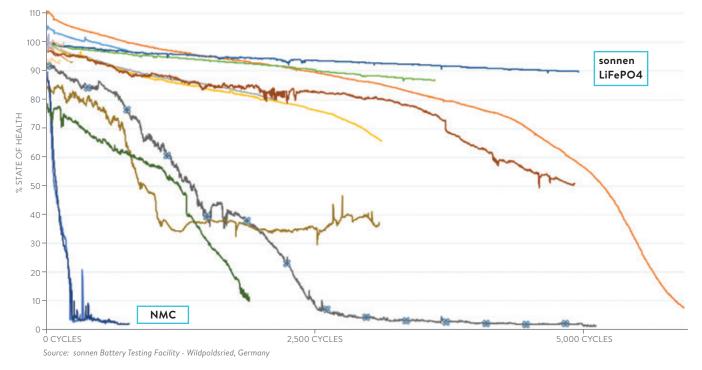


**All-in-One, Sleek Design.** An easy-to-intall, essentially "plug-and-play," elegant and fully integrated product that includes everything required for the system to function — no extra parts or pieces required!

#### Future-Forward Clean Energy Community.

Your sonnen intelligent energy storage solution is future-ready with the capability to join a sonnenCommunity of connected, clean energy homes that are building the smart energy grid of the future. See pages 6 -7 for more information.

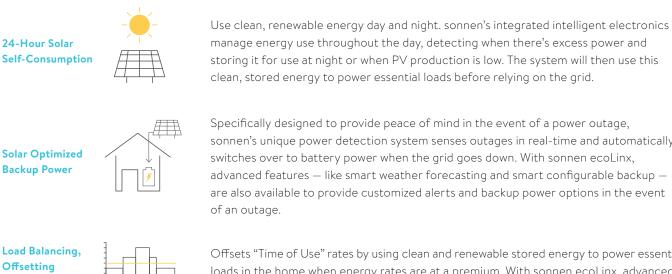
#### Superior Battery Chemistry — Proven as the Longest-Lasting Module in the Industry



The sonnen intelligent energy storage solution uses Lithium-Ion Iron Phosphate (LiFePO4) batteries, which are superior to other battery chemistries in safety, reliability and performance – including Lithium-Ion Nickel Manganese Cobalt (NMC) (electric car batteries). With a proven record of safety and longevity – lasting a minimum of 10 years/10,000 cycles – the LiFePO4 chemistry is the ideal solution for stationary energy storage in a home.

#### **Beyond Just Backup Power**

The sonnen intelligent energy management system goes beyond backup power, providing several key applications for your home.



**Peak Periods** 

Specifically designed to provide peace of mind in the event of a power outage, sonnen's unique power detection system senses outages in real-time and automatically switches over to battery power when the grid goes down. With sonnen ecoLinx, advanced features – like smart weather forecasting and smart configurable backup – are also available to provide customized alerts and backup power options in the event of an outage.

Offsets "Time of Use" rates by using clean and renewable stored energy to power essential loads in the home when energy rates are at a premium. With sonnen ecoLinx, advanced features - like smart demand control and smart load management - dynamically manage and maximize the use of clean, stored energy to offset peak utility rates.

## sonnenCommunity - Creating Clean Global Communities

Acting as the world's first "peer-to-peer clean energy trading platform," the groundbreaking sonnenCommunity in Germany is the world's largest distributed network of residential energy storage systems. And with the sonnenCommunity coming to American households soon, solar-powered smart homes in the U.S. will be able to join a network of clean energy providers to help build the clean and reliable grid of the future.





#### The sonnenCommunity in Germany

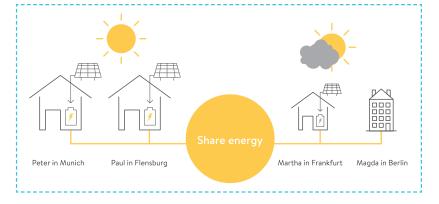
Taking energy storage to the next level, the sonnenCommunity in Europe is the first Virtual Power Plant (VPP) of its kind and largest distributed network of energy storage systems in the world.

#### How it Works

With a sonnenBatterie and PV system, customers can completely cover their own energy needs on sunny days — often even generating a surplus. This surplus is then stored in individual sonnen storage systems, creating a virtual energy pool. When needed, energy is discharged from the virtual energy pool to the conventional power grid to meet the needs of other

community members who are unable to produce enough energy of their own, thus creating a "peer-to-peer" energy trading platform.

A centralized virtual power plant software links up and monitors all sonnenCommunity members. As a sonnenCommunity member, they are independent. From now on, they supply their home with renewable energy that is generated — making them a key part of the future of energy!



#### The sonnenCommunity in the USA - A New Carbon-Neutral Community

#### Mandalay Homes - Jasper sonnenCommunity

In 2018, sonnen and Mandalay Homes partnered to break ground on the first significant U.S. Virtual Power Plant (VPP), known as the Jasper sonnenCommunity, in Prescott Valley, Arizona. Jasper represents a revolution in new home design and community development with **2,900 highly-efficient clean energy homes** that are each outfitted with solar + storage. The entire development also provides a hive of clean energy homes that join together to form a VPP that modernizes grid services for the local utility operator.



Hive 2018 & 2017 Innovator 50



EPA 2017 Indoor airPLUS Leader

#### Pearl Homes - Hunters Point sonnenCommunity

Distinguished Awards for Jasper sonnenCommunity

In 2019, Pearl Homes breaks ground on the second sonnenCommunity, known as Hunters Point, in Cortez, Florida. This LEED Platinum, Net Zero PLUS community will consist of **850+ homes and rental properties** that each feature solar + sonnen's energy automation system + Google Home automation to deliver the ultimate energy efficient, energy positive homes.

Forbes

TecHome

TecHome 2018 &

2017 Brilliance

In addition to the Jasper and Hunters Point, sonnen has several negotiations in progress with leading builders and developers to bring the sonnenCommunity (VPP) to **40,000+** new homes nationwide.

U.S. Department of Energy 2017

Housing Innovation

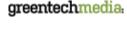
#### Making National Headlines with sonnenCommunity



EPA 2018 Energy Star

Partner of the Year

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Treehugger





## Advancing Innovation with ecoLinx and Energy Automation

sonnen is committed to being an industry leader, and with that comes the continuous introduction of new, cutting-edge innovations – like energy automation with new *ecoLinx!* 

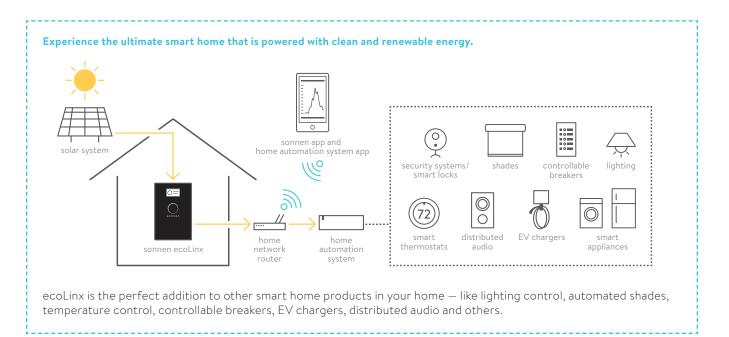


sonnen ecoLinx

ecoLinx is a sleek, all-in-one energy management solution that integrates intelligent energy storage with leading front-end home automation systems to fully manage your home's energy usage – giving you energy automation and the ultimate *clean energy smart home*.

Using advanced technology, the system monitors daily solar production, household energy usage and weather forecasts to adapt to your home's energy needs in real-time – protecting you against power outages while also powering your home in the cleanest and most efficient way possible.

And with a guarantee of **15 years / 15,000 cycles**, you will not only receive a warranty that is unsurpassed in the residential storage market, but one that will also **outlast** the warranty of most other smart home products.



### Giving Back to Those in Need

sonnen gives back, and in a big way. With our worldwide humanitarian efforts, we are committed to providing relief to communities in need, like in Puerto Rico, where infrastructure suffered catastrophic damage during Hurricane Maria. In response to the devastation, sonnen and a local Preferred Contractor partnered to donate (15) community nanogrids or "energy oasis" centers. These centers provide basic power for schools, health clinics, washing machine facilities and community kitchens throughout the island and are designed to provide resiliency in the face of future storms. And it doesn't stop there.

sonnen is proud to partner with the *del Sol Foundation for Energy Security* – a global non-profit focused on providing resiliency and relief to those suffering from climate disaster and power outages.



<u>Thousands of mini-</u> electric grids to be built in Puerto Rico using churches

PBSO NEWS HOUR

<u>Can solar energy speed</u> <u>Puerto Rico's recovery?</u> <u>Here's what it would take</u>

## Bloomberg

<u>Puerto Rico to Get Power</u> <u>Relief From German</u> <u>Microgrid Supplier</u>



<u>'The Status Quo Should</u> <u>Not Be an Option': How</u> <u>Solar Could Transform</u> <u>Puerto Rico's Future</u>



<u>Sonnen Working</u> Overtime To Power Up <u>Puerto Rico</u>





Since 2017, the (15) humanitarian microgrids donated by the del Sol Foundation for Energy Security have been serving over **4,000** *families*, saving lives, bringing normalcy back to daily life and inspiring and enabling communities to rebuild — a hand up, not a handout. Learn more at *delsolfoundation.org*. By providing basic power, the work of the del Sol Foundations is:



Saving Lives

Powering "lavanderias" (community washing machines), refrigerators, some basic electrical outlets and health care clinics — giving hundreds of families access to basic health needs. 4

#### **Sustaining Communities**

Providing refrigeration and meal preparation, clean water storage and basic electricity used to power Wi-Fi communications.



#### **Powering Education**

Powering lights, refrigeration, microwaves and fans for a school that provides psychological services for children with behavioral and developmental disabilities.

### We invite you to join the sonnen family!

The sonnen intelligent energy storage solution is sold exclusively through a network of trusted solar, electrical and home automation partners across the U.S., Canada and around the world. Our certified partners are experts in designing clean energy solutions that fit your energy needs and adapt to meet your changing lifestyle.

## To get started today, please contact us for more information and/or to be connected with a local sonnen Certified Installer near you.



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## Join us today to build the clean energy future of tomorrow.

