

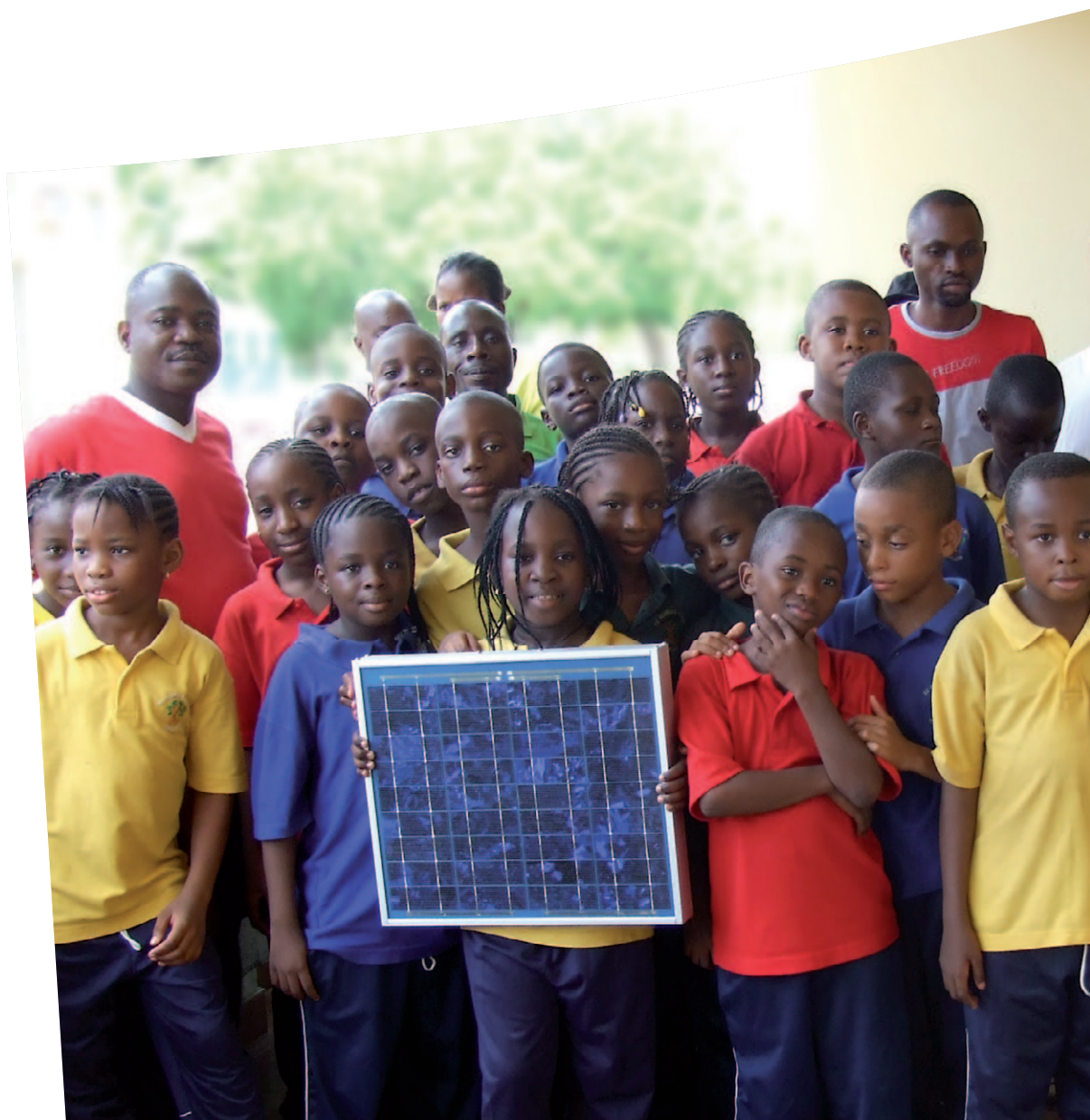


Wagner Solar

ENERGIETECHNIK
ENERGY TECHNOLOGY
TECHNOLOGIE ÉNERGÉTIQUE
ENERGIETECHNIEK

Because Power is Needed Everywhere

Off-grid solar power systems





Power. Heat. Future

As first hour solar pioneers we have collaborated successfully with the sun since 1979. We are a one-stop systems supplier and offer solar power, solar heat, mounting systems and sustainable energy technology solutions.

Our solar passion

In the same way that we operate as an enterprise, carefully chosen components optimize interaction in our system solutions. Many competitive awards testify to their performance, countless operating projects prove it daily.

Progressing together

We supply solar power systems for private users, public facilities, commercial enterprises and investors. We deliver installations of outstanding quality at the best value-for-money ratio, aiming to contribute substantially to an energy sea change.

WAGNER SOLAR GMBH

1979	founded in Marburg
2014	Wagner Solar GmbH, Kirchhain and Cölbe
65	employees
Partner	for solar power, solar heat, space-heating mounting systems and energy technology
Distribution through a network of professional installers	



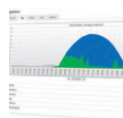
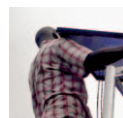
Entrepreneur of
the year 2011



Outstanding
responsibility

Contents

OFF-GRID PLANTS	Decentralized power supply Economic alternative User groups and applications	4
SYSTEM SUPPLIER	Many years of solar experience Selected components	6
SYSTEM SOLUTION 1	DC-coupled systems for direct or alternating current loads	8
SYSTEM SOLUTION 2	AC-coupled systems for off-grid power supply to stand-alone houses and estates	9
SYSTEM SOLUTION 3	Solar pump systems for irrigation and drinking water supply	10
OVERVIEW	Planning and installing together Additional offers	11



Shape the Future - Produce Your Own Power

Solar power systems needing no delivery grid provide a decentralized and ecological energy supply. They are the outstanding solution when building a grid supply is technically impossible, economically prohibitive or ruled out by other factors.

Ecological problem solvers

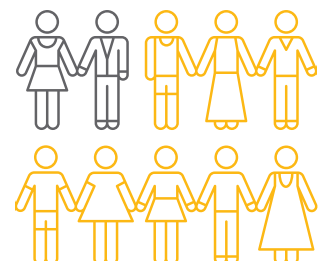
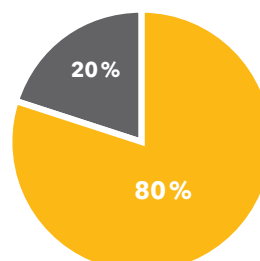
Just like grid-connected solar power systems, off-grid (stand-alone) ones convert sunlight into electricity. The power produced is either used immediately or stored to be used later. No public power grid is needed.

Economic alternative

Off-grid solar power generation systems are robust, durable and need no fossil fuel, making them practical and economic alternatives to other stand-alone systems such as diesel generators. And they can easily be combined with other environment-friendly energy technologies like wind and water.



More than 1.6 billion people still are without electricity. Stand-alone solar power generation systems offer outstanding possibilities to power up even hard-to-access areas in an ecologically and economically sound fashion.





Many options

Off-grid solar power systems can deliver direct or alternating current. Applications range from scientific measuring stations to telecommunication installations. Larger plants can supply AC to remote residential houses, agricultural enterprises or whole villages. Solar-powered pumping systems are used for irrigation and drinking water supplies.

Widely varied users

We offer our solar power systems worldwide to entrepreneurs, specialized installers and wholesalers. We greatly value cooperation with development aid organizations. We support projects with our know-how and pursue systemic solutions that meet needs economically.



SYSTEM ADVANTAGES

- Self-sustaining, decentralized energy supply
- No fossil fuel needed
- Durable, low-maintenance technology
- Supports regional development
- Ecological contribution to an energy transformation

WAGNER SOLAR STRENGTHS

- Experienced solar specialist
- Systems supplier for many years
- Outstanding references
- Strong partner, committed team
- Customer-friendly warranty terms
- Reliable after-sales service

Solar Power Needs Teamwork – Look for the Right Attitude

We offer customized off-grid solar power systems. To meet the given situation they comprise various components. Their quality and optimal compatibility determine the performance of the systems.

Access solar experience

A supplier of reliable solar power systems for many years, we prioritize needs-appropriate planning of installation size and storage capacity. That prevents supply shortfalls from under-dimensioning and unnecessary costs from over-dimensioning the installation.

Employ system competence

Our DC and AC systems allow for problem-free integration of other power generators to cover low-sunshine periods. They can also be expanded to complex power grids, for example to supply an entire village.

Defining need, design and installation

Before planning starts, it has to be established who needs how much energy where, at what times of day and year. Our design draws on many years experience to customize installations precisely to actual needs at the best value for money. We deliver single components or whole systems and connect you with installers appropriate to your project, located near you.





Selected components

To achieve reliable optimum power output we use only the best components of leading manufacturers and make no compromises on quality, favorable prices and durable peak performance.

AT A GLANCE



HIGHLY EFFICIENT PANELS

We work with leading manufacturers and use panels of various sizes and designs. They are highly efficient and display minimal fluctuations.



RELIABLE RACKING SYSTEMS

Our patented TRIC racking system is widely applicable and exceptionally robust. It offers customized fastening techniques for the most varied racking demands.



HIGH QUALITY CHARGE CONTROLLERS

The central power control and distribution units are equipped with state-of-the-art charging and monitoring technology for a long service life and high performance of the solar batteries.



POWERFUL SOLAR BATTERIES

We use especially powerful and long-lasting batteries that work problem-free even with frequent charging and discharging.



BATTERY INVERTERS

To supply alternating current loads reliably and to integrate power generators flexibly, we use selected inverters of the highest quality and durability.



INVERTERS

Market-leading technologies tested worldwide and customer-friendly warranty terms make our grid feeders long-lasting, reliable and especially economic.

System Solution 1

DC-coupled systems for direct or alternating current

Our DC-coupled systems are especially suited to supplying consumers with low energy needs, such as remote measuring stations and telecommunication gear.

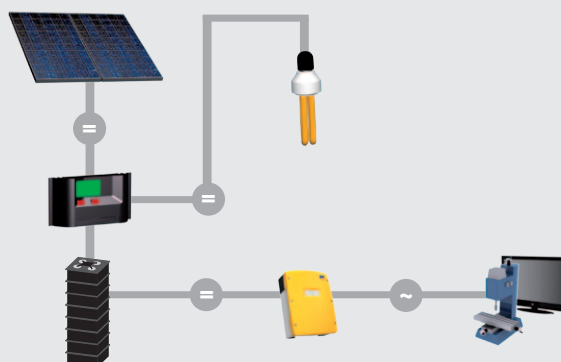
Properties and features

- Efficient supply to direct current loads directly from a battery
- Simple and low-loss conversion to various DC system currents, if required
- Capability to connect conventional 230V loads through an inverter
- Direct current basic supplies for uses like lighting and cooling facilitate health care, education and economic development in regions remote from the grid



DC-COUPLED SYSTEMS

The power that solar panels produce during daytime is stored in a rechargeable battery, making it also available at night or in bad weather. A special charge controller protects the battery from overloading and deep discharge. A connected inverter can enable 230V loads.



System Solution 2

AC-coupled systems for stand-alone houses or estates

Our AC-coupled systems are ideal for building smaller power grids up to village size. In addition to powerful panels, their core components are the inverters that create a fully functional grid.

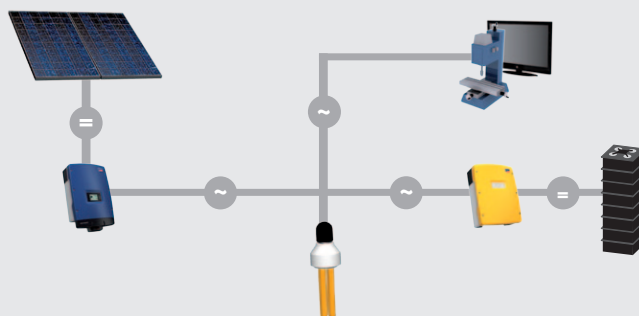


Properties and features

- Building small, independent power grids
- Simple expansion and adaptation to growing energy demand
- Excess energy is stored in rechargeable batteries and can be used as needed
- Self-sufficient supply for small commercial and artisan enterprises and public facilities like schools and hospitals
- Reliable and sustainable power supply for existing unstable or unsafe power grids

AC-COUPLED SYSTEMS

The solar panels feed the power through a Sunny Boy grid connect inverter directly into a 230V stand-alone grid. Excess power is stored by the Sunny Island bidirectional battery inverter and charger into solar batteries and is accessible as required. The battery inverter also regulates the Sunny Boy grid connect inverter.



System Solution 3

Solar pumping systems

Our solar pumping systems provide independent and reliable supply of clean drinking water and are used in irrigation equipment.



Properties and features

- Operable directly or from battery
- No batteries are needed for direct operation, considerably reducing maintenance and service costs
- Smooth integration with existing power supply systems
- The water is stored in a raised tank sized to ensure short stagnation times, keeping the water clean and constantly accessible.

SOLAR PUMPING SYSTEMS

To obtain the maximum energy yield and ensure highly efficient pumping, a special pump controller converts the DC voltage into the triple-phase supply voltage. To keep the supply of water constant, it can be stored in a raised tank and used as required.





Are You Ready for Solar Power ?

Get started now

Contact us to plan and realize your off-grid solar power system. We'll gladly help you from the first steps on.

Plan with us

Access our many years of solar experience and system competence. We use professional tools and have references from all over the world. Depending on what you want to build and where that is to be, we will gladly put you in touch with specialists to install and service your installation.

We offer training

We regard our systems as a contribution to a global energy transformation and an important step to a fairer energy supply. To that end, depending on demand, we are happy to offer training in fitting and maintaining the installations.

www.wagner-solar.com.

OFF-GRID QUICK CHECK

Technical demand analysis

Who needs how much energy at what times of day and year for which consumers ?

Planning and design

Which components meet the requirements most economically ?

Delivery and installation

Are only components or an entire installation required ?
Who installs the system ?

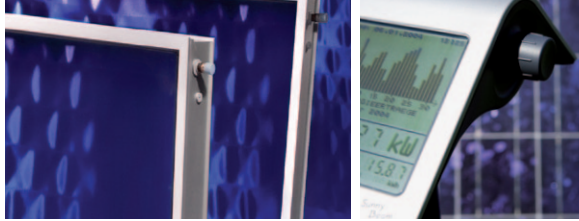
After sales service

What is necessary to assure smooth continuous operation of the system ?
Are technical trainings required on location ?

Power. Heat. Future

We are solar pioneers with foresight and have been successfully working with the sun for more than 35 years.

As a one-stop systems supplier we stand for integrated sustainable solar power, solar heat, mounting systems and energy technology..



OUR PRODUCTS

Solar power systems

- for private residential buildings
- for public facilities
- for commercial enterprises
- for agricultural applications
- for off-grid projects
- for investors

Solar heating systems

- for private residential buildings
- for public facilities
- for commercial enterprises
- for agricultural applications

Heat recovery

- for private residential buildings
- for public facilities
- for commercial enterprises



Wagner Solar has a constantly expanding international distribution network.