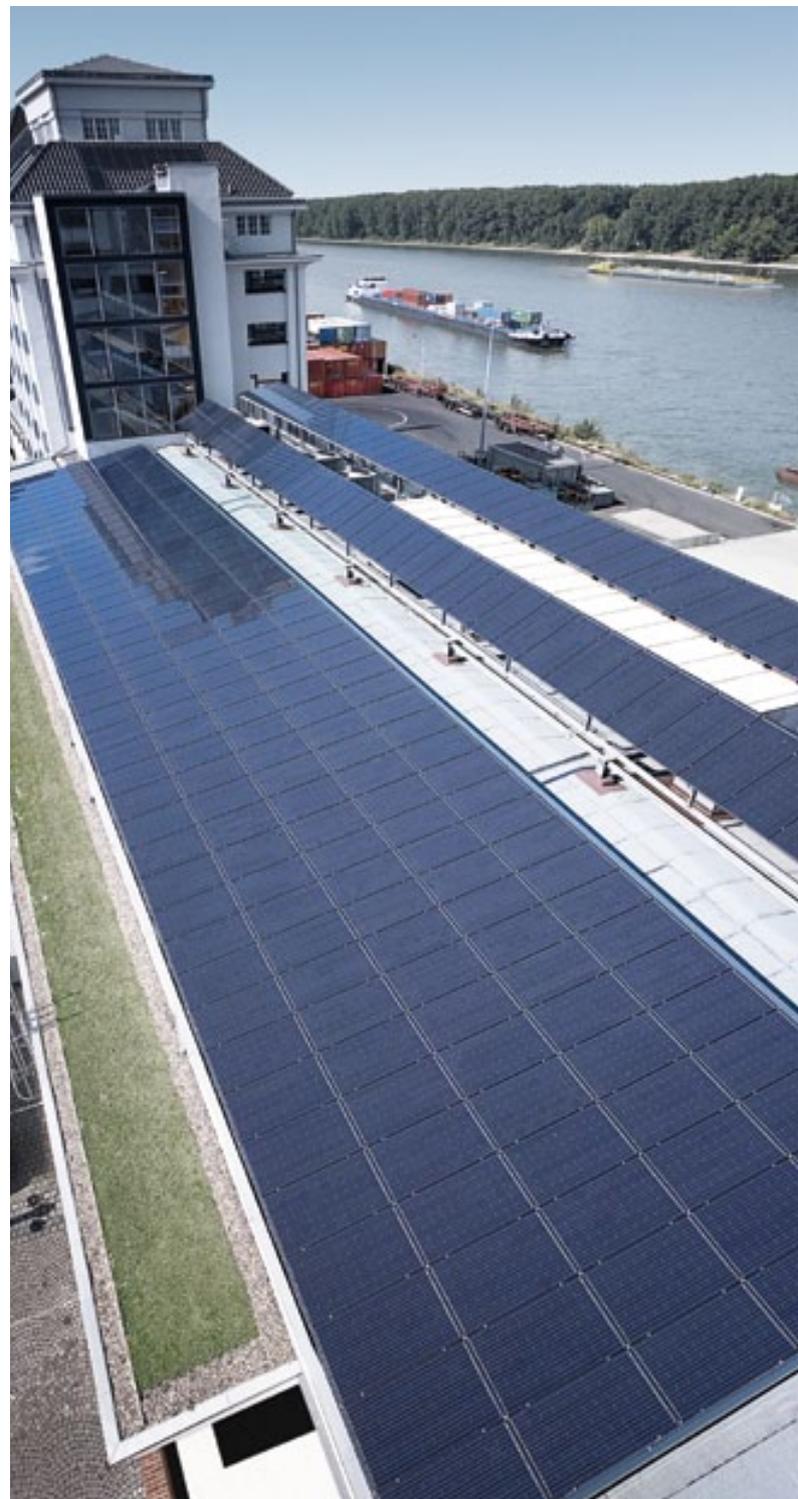


PRODUCT CATALOGUE 2013

For installers, planners and wholesalers





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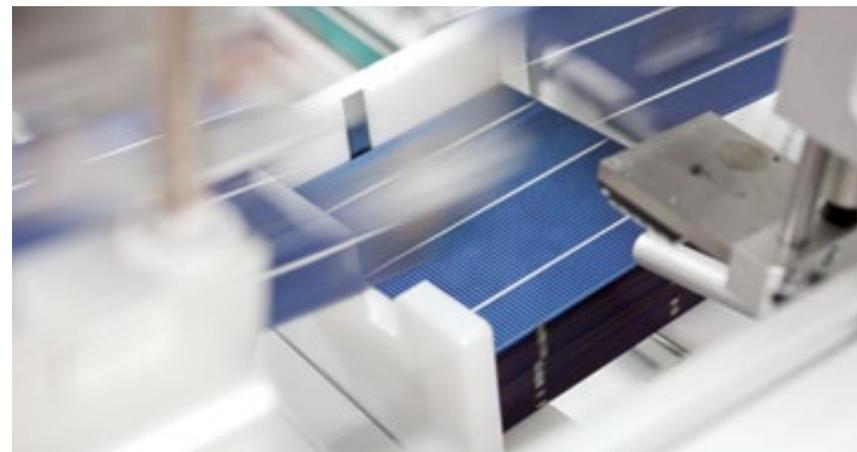
Tomorrow's technology today

The transition of our energy supply to renewable energy is in full swing, and solar technology is undergoing dynamic changes. As a solar pioneer, we are always one step ahead of all new developments, making it easy for you to keep up with the trends. Our products allow your customers to use solar power at home and to reduce their electricity costs by covering a large portion of their electricity needs themselves.

SolarWorld customers benefit from versatile kit and system solutions and from our comprehensive services and

extras. We support you every step of the way, starting with the planning of the solar power system. You make the measurements, and we plan and assemble the kit to fit your customer's needs, saving you time and money, because we have the right solution for every roof.

With our products, you're perfectly equipped – today and tomorrow.



Quality is measurable: We constantly test the quality of our products. Various independent test facilities regularly award us top marks.



SOLARWORLD PRODUCTS – QUALITY FROM A SINGLE SOURCE

- » **35 YEARS OF EXPERTISE:** As a PV pioneer, we have been producing top quality for over 35 years with expertise and passion, focussed on crystalline solar power technology from the beginning.
- » **OPTIMAL SYSTEM SOLUTIONS:** With our diverse range of products, we offer system solutions for all solar energy applications. But we never rest on our laurels with our technical developments. Instead, we equip you perfectly for the future, today.
- » **COMPREHENSIVE TESTS:** Intensive tests that greatly exceed international standards are the key to our holistic approach to quality assurance. In this way we ensure that only premium quality products leave our factories.

- » **BEST PROTECTION:** Whether free system insurances or real-time yield monitoring, we offer many additional services that safeguard the smooth operation of solar power systems.
- » **THE MOST CUSTOMER-FRIENDLY GUARANTEES:** With the linear performance warranty of over 25 years, a 10-year product workmanship warranty, and a number of other guarantees on quality and service, we provide long-term security.
- » **A STRONG PARTNER:** Personal service, professional PV system design, guaranteed quality. We offer everything one would expect from a reliable partner.

* in accordance with the applicable SolarWorld service certificate upon purchase | www.solarworld.com/service-certificate




SOLARWORLD


Sunmodule[®] Plus – *Quality and performance*

With over 35 years of production experience, SolarWorld has been one of the global market leaders for many years and played a key role in the development of crystalline solar power technology from the very beginning. All the stages of production, from the acquisition of silicon to module production, were established at the German production site in Freiberg. This is precisely how SolarWorld ensures the best quality throughout the entire production process. After all, only the best solar power system also offers a secure investment. And if you invest in the most efficient product, you can look forward to long-term yields. SolarWorld makes the decision for your customers easy and ensures the best quality – starting with the module.



SolarWorld AG relies on Germany as its center of excellence for solar technology, thereby ensuring sustainable product quality.



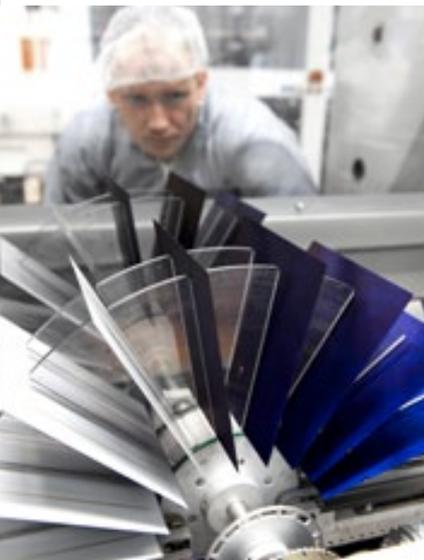
The TUV Rheinland Power controlled inspection mark guarantees that the nominal power indicated for a Sunmodule Plus is inspected at regular intervals and thus ensured. The deviation to TUV is maximum 2 percent.



The positive power tolerance guarantees utmost system efficiency. Only modules achieving or exceeding the designated nominal power in performance tests are dispatched. The power tolerance ranges between -0 Wp and +5 Wp.



With its linear performance warranty covering a period of 25 years, SolarWorld guarantees a maximum performance degradation of 0.7 % p.a., a significant added value compared to the two-phase warranties common in the industry. Therefore, the service certificate offers comprehensive protection for your investment in the long term.





In addition to the product benefits listed on the previous page, the SolarWorld Sunmodule Plus also includes the following high-quality features.

ADDITIONAL PRODUCT BENEFITS

- » Fully automated production at highest quality level
- » SolarWorld solar modules are resistant to frost and hail and can therefore withstand any winter conditions
- » DLG and TUV-tested resistance against ammonia: ideally suited for use in agriculture
- » Maximum pressure load up to 5.4 kN/m² for high snow loads
- » Tested resistance to salt mist for use in coastal areas



Sunmodule Plus SW 240–255 poly



Sunmodule Plus SW 260–275 mono black

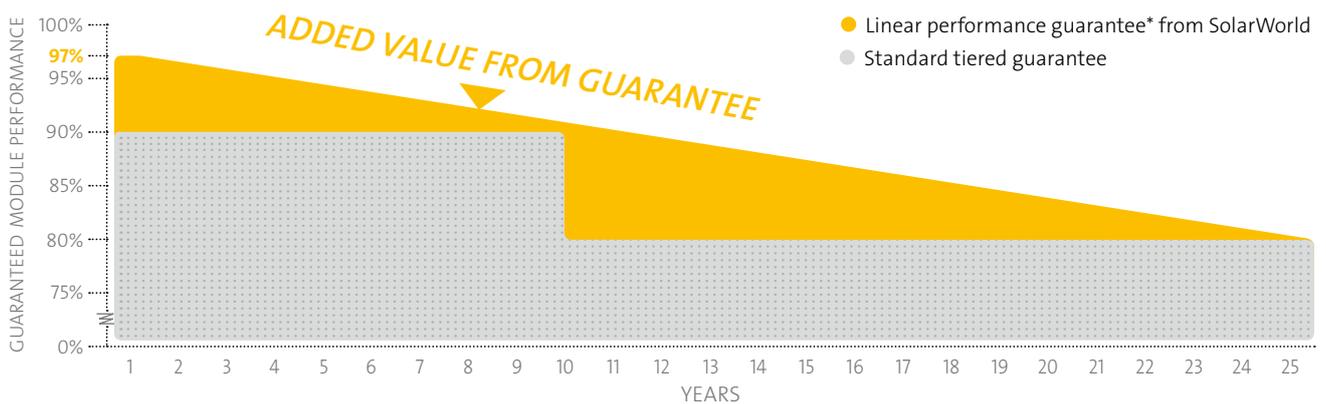


Sunmodule Plus SW 265–280 mono

Technical data

	SW 240–255 POLY	SW 260–275 MONO BLACK	SW 265–280 MONO
Length x width x height	1675 x 1001 x 31 mm	1675 x 1001 x 31 mm	1675 x 1001 x 31 mm
Frame	Silver anodized aluminum	Black anodized aluminum	Silver anodized aluminum
Weight	21.2 kg	21.2 kg	21.2 kg
Cells per module	60	60	60
Cell dimensions	156 x 156 mm	156 x 156 mm	156 x 156 mm
Power sorting	-0/+5 Wp	-0/+5 Wp	-0/+5 Wp

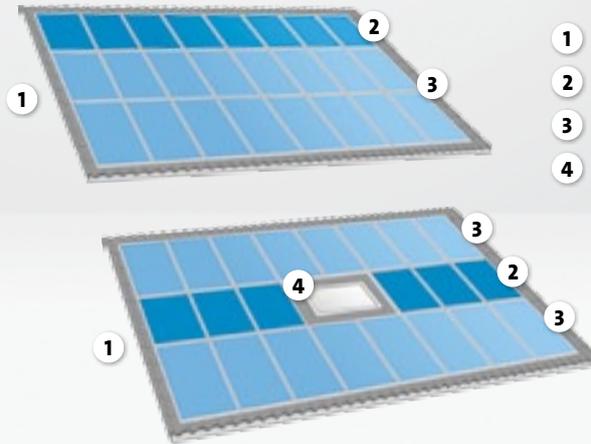
Linear performance guarantee*



* in accordance with the applicable SolarWorld service certificate upon purchase | www.solarworld.com/service-certificate



Sunmodule Plus SW 196 Vario poly

**Application examples**

- 1 Existing roof surface
- 2 Sunmodule Plus SW 196 Vario poly
- 3 Sunmodule Plus SW 245 poly
- 4 Skylight

New module size offers greater flexibility for solar power systems

This SolarWorld innovation makes it possible to combine two module classes within one roof-mounted system. The combined installation can also be planned using Suntool 2. The Sunmodule Plus SW 196 Vario poly has the same width as standard SolarWorld modules, yet is two cell rows shorter – plus it's perfectly matched to the Sunmodule Plus SW 245 poly. By combining these two quality modules and the Sunfix plus mounting frame, you make optimum use of your roof surface.

PRODUCT BENEFITS

- >> Compact dimensions increase flexibility for fully exploiting the roof surface
- >> Includes the option of combining two power classes within one solar power system
- >> Can be planned with Suntool 2
- >> Perfectly matched to the Sunmodule Plus SW 245 poly
- >> Homogenous module installation for an elegant appearance and impressive efficiency
- >> Compatible with mounting kits for self-consumption



Technical data

SW 196 VARIO POLY

Length x width x height	1357 x 1001 x 31 mm	Cells per module	48
Frame	Silver anodized Aluminium	Cell dimensions	156 x 156 mm
Weight	17.4 kg	Power sorting	-0/+4 Wp



Sunmodule SW 50 poly RMA



Sunmodule SW 80 poly RNA



Sunmodule SW 135 poly R6A

Sunmodule® – For off-grid solar power systems

SolarWorld also produces solar modules for powering small decentralized applications at its fully automated production facility in Freiberg. These off-grid modules meet the same durability, quality and performance requirements as the standard SolarWorld sets for the Sunmodule Plus series. In close collaboration with battery and charge controller manufacturers, SolarWorld also offers additional services for the design of off-grid systems.

PRODUCT BENEFITS

- >> Designed for battery systems
- >> The diodes of the off-grid modules can be replaced without special tools
- >> The module's permanent and laminated type plate ensures that the nominal power can no longer be falsified



Technical data

	SW 50 POLY RMA	SW 80 POLY RNA	SW 135 POLY R6A
Length x width x height	680 x 680 x 34 mm	958 x 680 x 34 mm	1508 x 680 x 34 mm
Frame	Aluminum	Aluminum	Aluminum
Weight	5.6 kg	7.6 kg	11.8 kg
Cells per module	36	36	36
Cell dimensions	62 x 156 mm	94 x 156 mm	156 x 156 mm
Power sorting	+/-10 %	-5/+10 %	+/-5 %



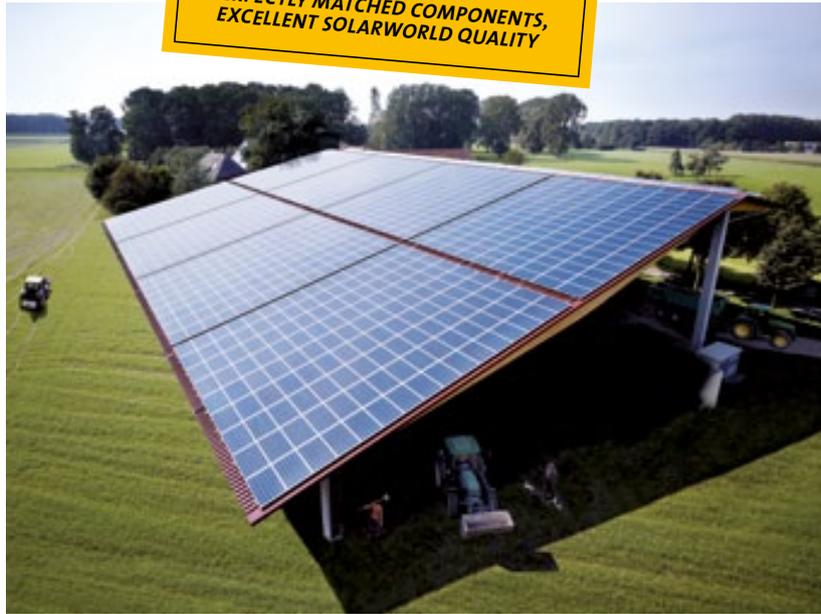
SolarWorld kits – “All-inclusive packages” by professionals for professionals

Enjoy sales success with your customers: With SolarWorld kits, you'll receive special all-inclusive service. The kits contain all components required for constructing and operating a solar power system: SolarWorld quality modules, inverters, data loggers with power management, mounting systems, cables and accessories. SolarWorld takes into consideration your customers' individual requirements as well as the specific building and on-site conditions to assemble a customized system solution. SolarWorld kits are perfectly planned in advance and assembled according to the latest standards.

Service that goes further: To round off the package, SolarWorld kits are insured for two years at no extra cost. This SolarWorld kits offer will not only safeguard your customers' investments but also give them real peace of mind. And to provide you and your customers with an overview of the system details at all times, SolarWorld also gives you a Sunpass – a comprehensive collection of quality and performance documents that is exclusive to SolarWorld.

PRODUCT BENEFITS

- » Planning, design and perfectly matched components from a single source
- » Tailor-made, pre-assembled kits that can be quickly and safely mounted
- » Always in compliance with the latest standards and norms
- » Upon request, the kits can be delivered directly to the construction site
- » Lots of optional extras, from system monitoring to system insurance
- » Certified mounting system statics according to Eurocode 1



Technical data

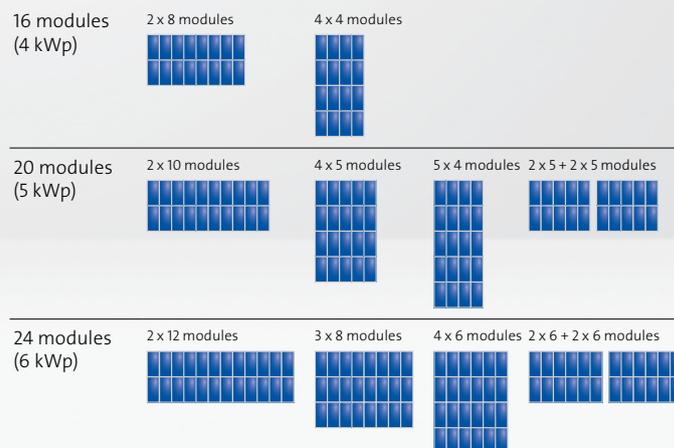
EACH SOLARWORLD KIT INCLUDES THE FOLLOWING COMPONENTS:

- > Solar modules: Sunmodule Plus poly, Sunmodule Plus mono black or Sunmodule Plus mono
 - > Inverters according to SolarWorld's standard configuration: Kostal or SMA
 - > SolarWorld mounting system: Sundeck, Sunfix plus, Sunfix aero, Suntub
 - > DC cable set: Suncable 1 x 4 mm² / 1 x 6 mm²
 - > System monitoring and visualization: Suntrol
 - > System documentation: Sunpass
 - > Special insurance: Two or optional five-year term
 - > Optional: Suntrol LED / LCD display
 - > Optional: Battery storage system and consumption control
-



**READY
FOR USE**

*From the pallet directly onto the roof:
All components for a pitched roof system*



Mounting possibilities SolarWorld Kit easy

SolarWorld Kit easy – All components on one pallet

Install a complete SolarWorld solar power system for your customers in the shortest possible time. With the SolarWorld Kit easy you receive all pitched roof system components pre-assembled on one pallet: high quality modules, optional inverter with integrated data logger and power management, mounting system, cables and accessories. As with every complete SolarWorld kit, complementary two-year kit insurance and the Sunpass are also included in selected countries. The well-designed packaging concept makes it easy to unload the pallet at the installation site. The SolarWorld Kit easy is available in three sizes with 16, 20 or 24 modules.

PRODUCT BENEFITS

- » Increased productivity for installer and specialist wholesaler thanks to simplified planning and logistics processes.
- » Complete solution: The SolarWorld Kit easy contains all components required for constructing and operating a solar power system.
- » Perfectly pre-engineered: The kit is entirely pre-engineered for pitched roof systems and is assembled according to current standards and norms. This saves time during preparation and installation.
- » Clever packaging: The compact and high-quality packaging guarantees quick and safe delivery right to the customer's construction site.
- » Maximum protection and overview: Includes complementary two-year kit insurance and Sunpass – the comprehensive documentation of quality and performance only found at SolarWorld (only available in selected countries).



**STANDARDIZED
SOLARWORLD KIT**
PERFECTLY MATCHED COMPONENTS,
EXCELLENT SOLARWORLD QUALITY

Technical data

MODULES	16 X SW 250 POLY	20 X SW 250 POLY	24 X SW 250 POLY
Total power	4000 Wp	5000 Wp	6000 Wp
Inverter SMA	SB 3600 TL-21 *	SB 5000 TL-21 *	SB 2500 TL-ST + SB 3000 TL-ST *
Inverter KOSTAL	PIKO 4.2 *	PIKO 5.5 *	PIKO 5.5 *
Solar cable set	Suncable 6 mm ² , 60 m	Suncable 6 mm ² , 120 m	Suncable 6 mm ² , 120 m
Mounting system	Sunfix plus single layer	Sunfix plus single layer	Sunfix plus single layer
Roof connection	roof hook	roof hook	roof hook
Shipping unit	europallet (EUR)	europallet (EUR)	industrial pallet (EUR 3)
Dimensions shipping unit	120 x 80 x 224 cm	120 x 80 x 224 cm	120 x 100 x 224 cm
Weight shipping unit	490 kg	600 kg	720 kg

* Alternatively to the above indicated single-phase SMA or three-phase KOSTAL inverters the Kit easy is available without inverter.
If two SMA inverters are ordered with the kit one inverter will be shipped on a separate pallet.
(The inverter configuration needs to comply with country-specific guidelines and needs to be adapted if required.)

EXTRAS

Sunpass**	System documentation as PDF and high-quality print version
Special insurance**	Two-year term free of charge, optional five-year term extension

** only in selected countries

STATICAL REQUIREMENTS

Roof type	Tiled roof
Rafter distance	60–80 cm
Roof pitch	15°–50°
Height of building	max. 15 m
Roof battens	24 mm and 30 mm
Snow load	according to planing documents
Wind load	according to planing documents



Sundeck[®] – *The perfect combination of aesthetics and efficiency*

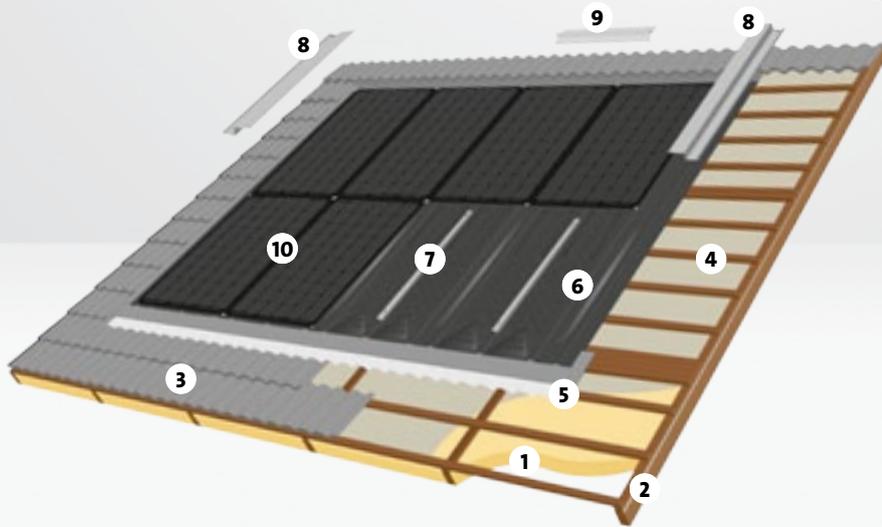
The roof-integrated system for customers with high standards: Sundeck enables SolarWorld high-performance solar modules to be elegantly positioned at the same level as the rest of the roof. Suitable for tiled roofs and slate roofs alike, it also sets new standards in terms of aesthetics as a complete roof solution. The Sundeck can be used for pitched roofs with an inclination of 15 to 60 degrees. This system will also save your customers the costs of a conventional rooftop covering. The Sundeck is technologically impressive and economical, with its small number of perfectly matched system elements. The cleverly designed rain-proof substructure is attached directly to the roof battens, making it easier to install solar power systems and simultaneously saving you time. During the planning phase, the kit is adjusted to ideally suit the building's individual requirements. So your customers can look forward to a truly stylish addition to their home, as well as maximum yields.

The Sundeck 8500 withstands extreme snow loads and is suitable for combined loads of up to 8.5 kN/m² thanks to its specially developed support profiles.

PRODUCT BENEFITS

- » Unique selling point for your business success – the system is only available from SolarWorld
- » Cost advantage through elimination of the present rooftop cover
- » High yields thanks to the special construction and optimum rear ventilation
- » The sophisticated system elements do not require roof hooks, ensuring fast installation
- » Perfectly suited for areas with high snow and wind loads
- » TÜV certification for maximum safety
- » Meets the guidelines for rain safety stipulated by the Central Association of the German Roofing Industry

SOLARWORLD KITS
PERFECTLY MATCHED COMPONENTS,
EXCELLENT SOLARWORLD QUALITY



- 1 Existing roof insulation
- 2 Existing rafters
- 3 Existing roof covering
- 4 Existing battens over underfelt or sarking
- 5 Sundeck bottom flashings
- 6 Sundeck main sheets
- 7 Sundeck support profiles (only with Sundeck 8500 model)
- 8 Sundeck side covers (optional)
- 9 Sundeck ventilation grilles (optional)
- 10 Sunmodule Plus solar modules

Sundeck in-roof system

Technical data

DETAILS

- > Delivery as a complete SolarWorld kit, including:
 - > Drainage plate as a substructure (incl. fastening screws, sealing calottes, module clamp specially matched to the system, cable clips and other clips with pre-assembled nails, equipotential bonding screws)
 - > Modules: Sunmodule Plus
 - > Inverters
 - > Pre-assembled cables
- > Certified statics according to Eurocode 1 in the SolarWorld kit
- > Sundeck 8500: capable of bearing loads up to 8.5 kN/m² thanks to special support profiles
- > Hard roof covering in conjunction with Sunmodule Plus according to DIN EN 13 501-5 and in conjunction with DIN V 4102-3
- > TUV-certified safety with regard to the roof membrane thickness requirements
- > Low load on roof construction compared to conventional roof coverings
- > Allowable wind speed: 100 mph*

* Subject to technical feasibility. SolarWorld Technical Planning will prepare an individual assessment for every application.



Sunfix plus – *The talented all-rounder for pitched roofs*

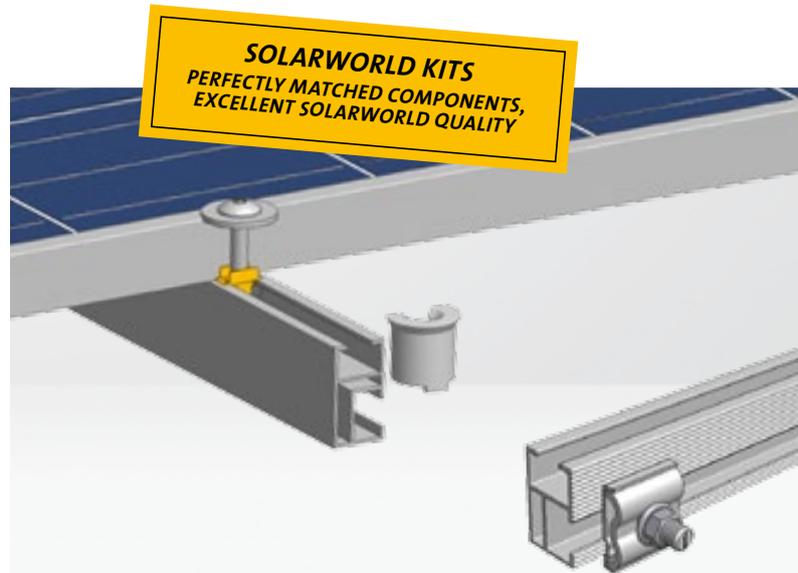
The Sunfix plus mounting system for pitched roofs is the multifunctional master of the SolarWorld mounting systems. Its versatile supporting structure makes it possible to install SolarWorld quality modules parallel with the roof surface on all kinds of pitched roofs. The solar power system subtly and elegantly blends into the roof's overall appearance thanks to the frame's sophisticated design. An all-inclusive package: Sunfix plus mounting kits feature high-quality, versatile components that are assembled to perfectly suit your customers' needs. It was designed by SolarWorld specialists to deliver optimum stability and a long system service life. Perfectly planned and matched to the requirements of your customers, the system can be quickly and easily installed on-site. With Sunfix plus, modules can be safely installed without causing any damage to the rooftop cover and roof membrane and the system consists of top-grade components made of aluminum and stainless steel to ensure a long service life. The potential equalization between the module and the mounting system in the overall system using the module and potential equalization clamps is VDE tested. Poor weather conditions are no match for the Sunfix plus: The mounting system for pitched roofs can withstand heavy loads in areas subject to heavy snowfall and strong winds.

PRODUCT BENEFITS

- >> Suitable for all pitched roofs
- >> Optimum rear ventilation for maximum yields
- >> The overall system's potential equalization is VDE-tested
- >> Components are perfectly and individually matched
- >> Pre-assembled components ensure straightforward and fast installation
- >> Only high-quality materials are used ensuring stability and durability



Fast installation thanks to the easily accessible screw fittings



Overall system's potential equalization between the module and the mounting system using the module and potential equalization clamps is VDE-tested

Technical data

DETAILS

- > Can be used as a single or double-layered system
- > Suitable for vertical and horizontal solar module installation
- > Low frame weight starting from 2 kg/m²
- > Certified statics according to Eurocode 1 in the SolarWorld kit
- > Can be mounted against or with the roof pitch
- > Roof hook types available for a wide range of applications
- > Optionally available with theft protection
- > Allowable wind speed: 100 mph*

* Subject to technical feasibility. SolarWorld Technical Planning will prepare an individual assessment for every application.

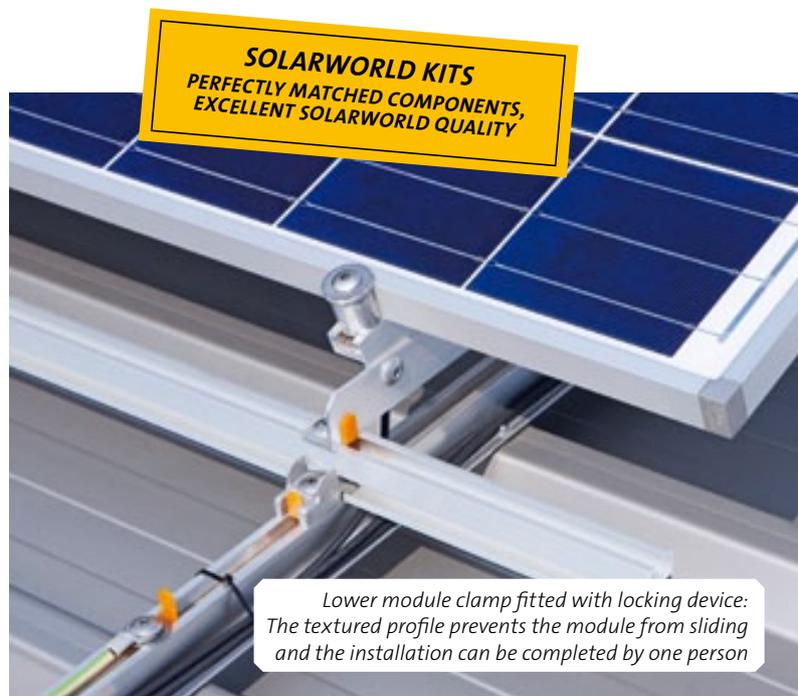
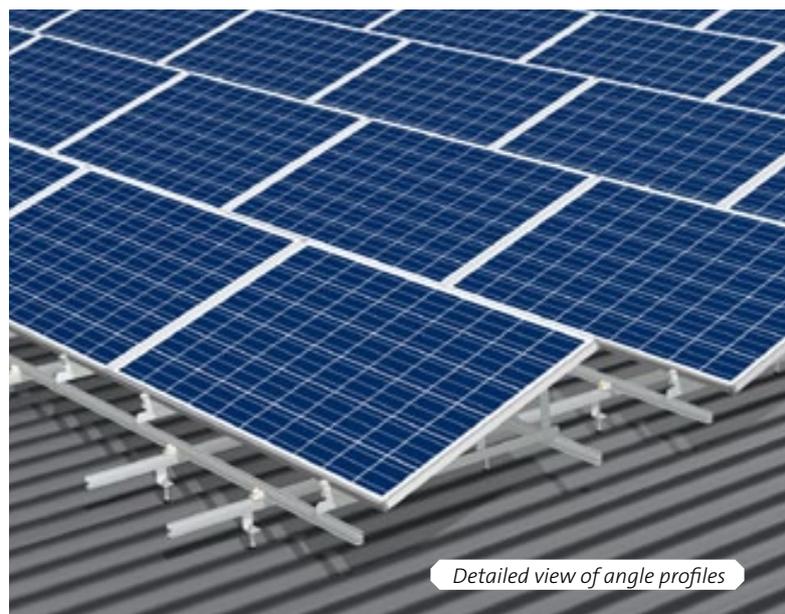


Sunfix plus – *The ideal mounting system for flat roofs*

The Sunfix plus mounting system for flat roofs is suitable for all standard roof structures and turns any flat or slightly pitched roof into an effective high-yield surface for your customers. The supporting structure allows for the free-standing installation of SolarWorld quality modules both with and against the roof pitch. Module pitches of 15, 20 or 30 degrees ensure flexible installation on any roof, allowing you to optimize the efficiency of the solar modules. They can also be installed up to 5 degrees different to the roof pitch and easily individually aligned. Perfect pre-assembly: The pre-assembled SolarWorld Sunfix plus frames are made of three lightweight aluminum angle profiles that simply need to be bolted into place. SolarWorld quality right down to the smallest detail: All fixing and connecting elements are made of high-quality stainless steel or aluminum. The mounting profiles are installed in a single or double layer under the flat roof frame and the roof structure. This ensures the stability of the flat roof system.

PRODUCT BENEFITS

- »» Suitable for all standard roof structures
- »» Light aluminum frame ensures low roof load
- »» Optimum use of space thanks to the wide range of installation options
- »» Cost-efficient installation thanks to pre-assembled system
- »» Few tools required due to standardized components
- »» Flexible tilt angle for optimized module efficiency
- »» Only high-quality components are used ensuring stability and durability



Technical data

DETAILS

- > Low frame weight starting from 6 kg/m²
- > Suitable for vertical and horizontal solar module installation
- > Can be used as a single or double-layered system
- > Certified statics according to Eurocode 1 in the SolarWorld kit
- > Optionally available with theft protection
- > Allowable wind speed: 90 mph*

* Subject to technical feasibility. SolarWorld Technical Planning will prepare an individual assessment for every application showing which components and/or ballast should be used.



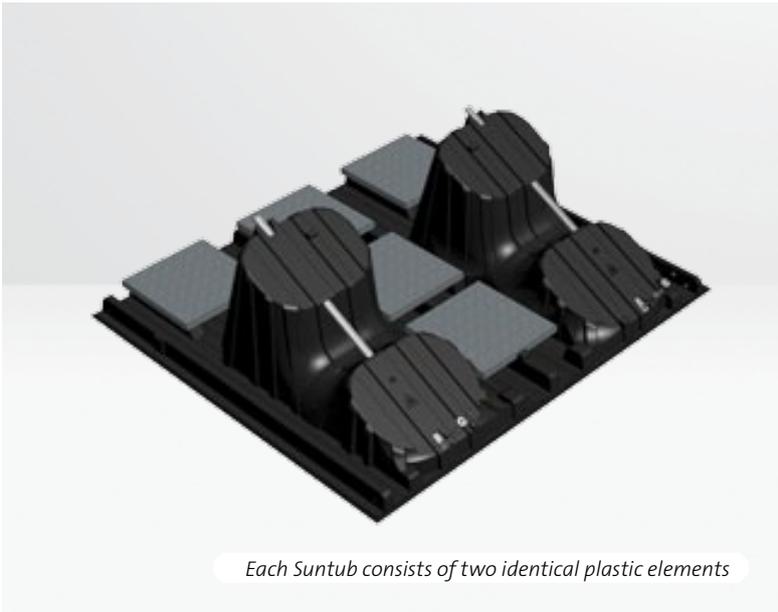
Suntub® – Powerful flat roof system

The SolarWorld Suntub flat roof system is extremely versatile and easy to install. It is perfectly suited for roofs with a pitch of up to 6 degrees, for example, on company buildings or bungalows. Suntubs can be fitted with different module types. Each Suntub consists of paired plastic elements that are easily slotted together and can be weighted down with the required ballast. The best part: You do not need a frame for the installation. As with all SolarWorld kits, the perfectly matched components make it especially quick and easy to install. The optimized shape of the mounting system provides excellent rear ventilation and ensures that the solar modules deliver outstanding efficiency. Thanks to their special shape, Suntubs generate about 3 percent more energy than conventional flat-roof tub installation systems. Another advantage of the Suntubs is their aerodynamic design, which reduces wind resistance and keeps the roof load to a minimum.

PRODUCT BENEFITS

- >> Small number of individual components for very fast installation
- >> Reduced ballast load and minimized roof loads through aerodynamic features
- >> No penetration of the existing roof membrane or floor covering
- >> Extremely stable thanks to a special profile that withstands wind and snow loads
- >> Great module yield thanks to optimum shape and excellent rear ventilation
- >> Easy to transport and install: Low dead weight, the plastic elements can be easily stacked and the aluminum profiles feature a proven clamping technique

SOLARWORLD KITS
PERFECTLY MATCHED COMPONENTS,
EXCELLENT SOLARWORLD QUALITY



Each Suntub consists of two identical plastic elements



The solar module is inserted from above and fastened using clamp connectors

Technical data

DETAILS

- > Basic material: 100 % recyclable UV-resistant HDPE
- > Modules: Sunmodule Plus
- > Permitted roof pitch: 0° to 6°
- > Tilt of elements: 28°
- > Required ballast: Gravel, concrete slabs (recommended slab dimension 40 x 40 cm)
- > Can be used in temperatures ranging from: -40°C to +85°C
- > Allowable wind speed: 90 mph*

* Subject to technical feasibility. SolarWorld Technical Planning will prepare an individual assessment for every application showing which components and/or ballast should be used.



Sunfix[®] aero – *Low-ballast flat roof system*

The name Sunfix aero says it all. The mounting system is installed without penetrating the roof membrane and forms a static interconnection which requires only minimal ballast. The aerodynamic, wind tunnel-tested system design ensures that the solar power system behaves like a Formula 1 racing car at high speeds: The frame literally clings to the surface of the roof. This reduces point and surface loads to a minimum. The different models (with inclination angles of 10, 15 and 25 degrees) can be optimized according to specific yield or system performance. At an inclination of 0 degrees, only ballasting is required, while at angles of 0 to 5 degrees the position also needs to be secured after the general set-up has been examined. Adjustable screw connections and clamps on the long sides of the modules ensure increased stability and make it possible to adapt the system to the building. The base and ridge gaps provide optimum rear ventilation of modules and increased performance.

The Sunfix aero duo modules are arranged in tent-shaped pairs allowing for maximum utilisation of the available roof area. This double design, which reduces shading between module rows, increases the roof's yield. The modules should be mounted at an angle of 10 degrees, ideally with an east-west alignment, in order to maximise the yield in relation to the roof surface area.

PRODUCT BENEFITS

- >> The aerodynamic design means less ballast is required, so the system can be installed on roofs with low load reserves
- >> No penetration of the sensitive roof membrane
- >> Quick and easy installation thanks to the pre-assembled, easily transportable system elements
- >> Optional lightning protection available
- >> Optimum rear ventilation through the base and ridge gap increases the solar module performance
- >> Thanks to the reduced shading, the Sunfix aero duo permits a high density and optimum utilisation of the roof area, resulting in an increase of the total output up to 60 percent

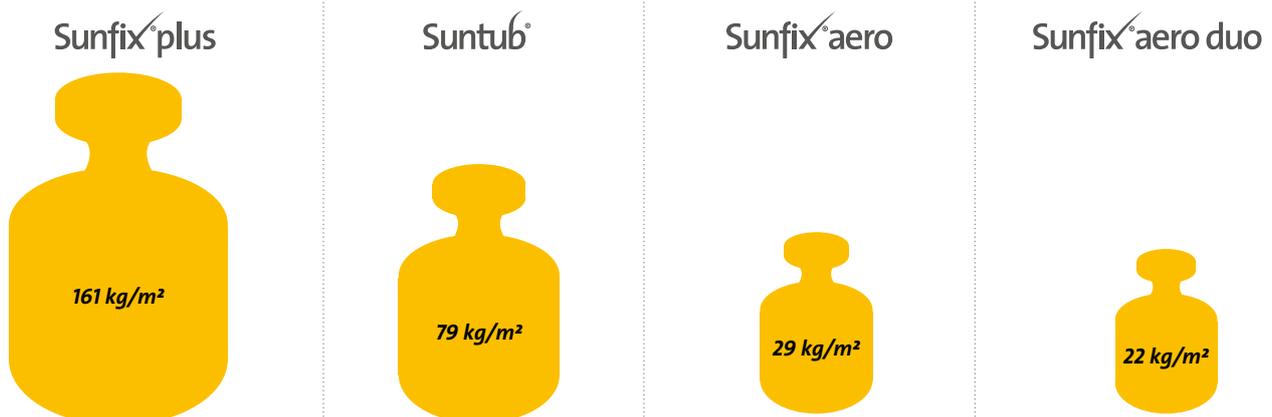


Technical data

	SUNFIX AERO	SUNFIX AERO DUO
Tilt angle:	10, 15, 25°	10°
Suitable for flat roofs with a pitch of up to:	5°	5°
System weight:	approx. 10 kg/m ² (standardized with 25° version)	approx. 3 kg/m ²
Frame / base static friction:	$\mu = 0,60$	$\mu = 0,60$
Suitable modules:	SW 240–280 (poly or mono)	SW 240–280 (poly or mono)
Minimum system size:	3 x 3 modules	1 x 2 modules
Allowable wind speed:	90 mph*	90 mph*
Allowable building height:	20 m	20 m

* Subject to technical feasibility. SolarWorld Technical Planning will prepare an individual assessment for every application showing which components and/or ballast should be used.

Comparison of the typical ballast load for a building height of 8–10 m*





SunCarport® – *Power generation and weather protection*

Truly multitalented: The SolarWorld SunCarport not only protects your car in any wind or weather, but it also creates an additional surface area for producing clean solar energy. Intelligent mobility: Electric cars will soon become commonplace on our streets and the SunCarport represents a vital contribution to this new kind of mobility. In combination with a charging station it can be used as a solar service station where electric and hybrid vehicles can recharge their batteries. Individuality and outstanding quality: Just like all SolarWorld kits, the SunCarport features SolarWorld quality modules, a matching inverter and a durable mounting frame. Anodized aluminum and powder-coated stainless steel components make it durable and virtually indestructible. In addition to the standard versions, SolarWorld also offers carports with reinforced components for particularly heavy snow and wind loads.

PRODUCT BENEFITS

- » Carport and solar power system in one
- » High-quality all-in-one solution
- » Can be used to charge electric cars and e-bikes with solar power in combination with an additional charging station
- » High-quality materials

SOLARWORLD KITS
 PERFECTLY MATCHED COMPONENTS,
 EXCELLENT SOLARWORLD QUALITY



SunCarport blue installed lengthwise



SunCarport black installed crosswise



SunCarport blue as a dual carport

Technical data (SolarWorld SunCarports with an inclination of 10°)

	LENGTHWAYS AS A SINGLE CARPORT	CROSSWISE AS A SINGLE CARPORT	LENGTHWAYS AS A DUAL CARPORT
Generator	9 modules	10 modules	15 modules
Generator output	2.2–2.5 kWp*	2.5–2.8 kWp*	3.7–4.1 kWp*
Inverters	SMA	SMA	SMA
Standard / heavy duty weight	535 / 562 kg	717 / 748 kg	1100 kg
Width	3220 mm	5241 mm	5241 mm
Length	5098 mm	3412 mm	5098 mm
Front height	2011 mm	2011 mm	2015 mm
Rear height	3024 mm	2829 mm	3005 mm
Available as a	SUNCARPORT BLUE The standard solution: SunCarport with blue polycrystalline modules	SUNCARPORT BLACK The designer solution: SunCarport with black monocrystalline modules	

*depending on the module performance class



SMA – Versatile and user-friendly

SolarWorld offers a wide product portfolio that includes SMA inverters. Inverters come with communication interfaces as standard and feature a well thought-out installation concept, which makes them especially user-friendly. All models provide a wide input voltage range, offering maximum flexibility for system planning. Devices with or without transformers are available for every grid type.

SMA inverters – technical data

	SB 3000TLST-21	SB 4000TL-21	STP 5000TL-20
Rated AC output power	3000 W	4000 W	5000 W
3-phase grid feed-in	no	no	yes
MPP voltage range	213–500 V	175–500 V	245–800 V
Max. input voltage	750 V	750 V	1000 V
Euro efficiency	96.1 %	96.3 %	97.1 %
Number of MPP trackers	1	2	2
Integrated data logger	no	no	no
Standard communication interface	RS485, Bluetooth	RS485, Bluetooth	Ethernet
Weight	23 kg	26 kg	37 kg
Certification	CE, G83/1-1, G59/2, VDE AR N 4105, VDE 0126-1-1, CEI 0-21, EN 50438	CE, G83/1-1, G59/2, VDE AR N 4105, VDE 0126-1-1, CEI 0-21, EN 50438	CE, G83/1-1, G59/2, VDE AR N 4105, VDE 0126-1-1, CEI 0-21, EN 50438

SMA PRODUCT BENEFITS

- >> Integrated power management functions and graphical display
- >> Standard wireless and wired communication (wireless only with new generation devices)
- >> Innovative installation concept, including Sunclix plug connectors



KOSTAL – Standard communication

SolarWorld inverters from Kostal offer standard communication and feature comprehensive communication interfaces. They can be directly integrated into the Suntrol portal to visualize your system's yields so that an additional data logger is not required. The devices offer transformerless topology and feed power into the public grid through three phases. Highly efficient and equipped with at least 2 MPP trackers, they ensure maximum yields and flexibility for system planning.

KOSTAL inverters – technical data

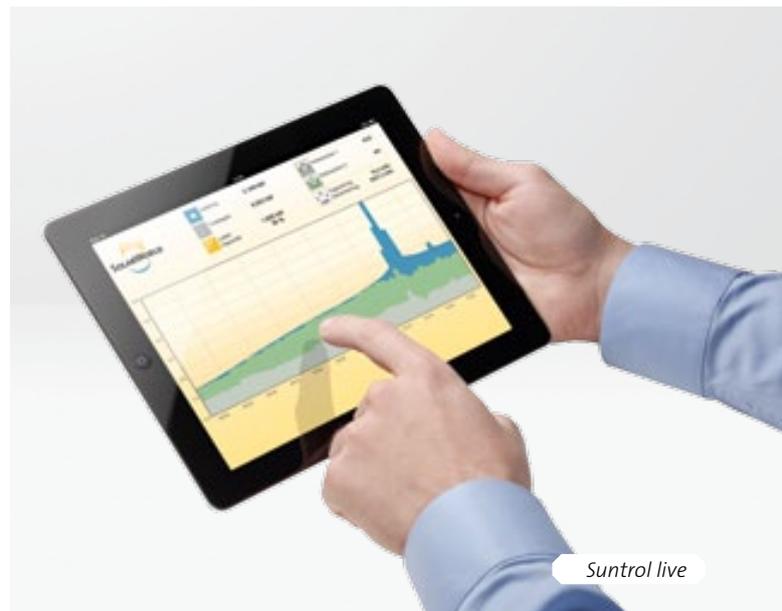
	PIKO 3.0	PIKO 4.2	PIKO 8.3
Rated AC output power	3000 W	4200 W	8300 W
3-phase grid feed-in	no	yes	yes
MPP voltage range	270–730 V	360–850 V	400–850 V
Max. input voltage	900 V	950 V	950 V
Euro efficiency	95.5 %	95.4 %	96.3 %
Number of MPP trackers	1	2	2
Integrated data logger	yes	yes	yes
Standard communication interface	Ethernet, RS485, S0	Ethernet, RS485, S0	Ethernet, RS485, S0
Weight	22 kg	20 kg	33 kg
Certification	CE, G83/1-1, G59/2, VDE AR N 4105, VDE 0126-1-1, CEI 0-21, EN 50438	CE, G83/1-1, G59/2, VDE AR N 4105, VDE 0126-1-1, CEI 0-21, EN 50438	CE, G83/1-1, G59/2, VDE AR N 4105, VDE 0126-1-1, CEI 0-21, EN 50438

KOSTAL PRODUCT BENEFITS

- » Three phase feed-in, starting at 4 kW (AC)
- » Integrated data logger saves additional costs
- » Free yield monitoring via the Suntrol portal



Suntrol-Portal



Suntrol live

Suntrol[®] – Keeping performance data in view

With Suntrol products from SolarWorld, you can display the yield of your solar power system clearly and monitor all the system data conveniently online. The Suntrol Internet portal provides system operators with an overview of all their performance data on a PC or smartphone at all times. The Suntrol data logger is connected to the inverter and displays the daily yield minute by minute. Moreover, the monthly and annual yields are recorded and graphically evaluated. And if you use an electronic domestic supply meter, there is an added option for displaying your own energy consumption. This provides a precise overview of how much of your own electricity you have consumed and when, as well as tips on how to increase this amount. Efficient yield monitoring helps to quickly detect possible deviations and remedy their causes. This enables your customers to recognize any system errors before they receive their invoice. WWW.SUNTROL-PORTAL.COM

PRODUCT BENEFITS

- >> Free portal for monitoring yields and the amount of electricity you produce
- >> Fault warning system saves your customers money
- >> Mobile system monitoring with Suntrol mobile for all smartphones and tablet PCs
- >> Option for presenting your own reference systems with the Suntrol portal and Suntrol mobile
- >> The amount of self-generated electricity consumed can be controlled via the Suntrol live in combination with the SunPac battery system



Suntrol data logger



Suntrol-Display



Suntrol mobile

Product family

SUNTROL PORTAL / KOSTAL INVERTERS

Kostal brand inverters feature an integrated data logger that records the yields of the solar power system. This data is then transmitted to the Suntrol portal, where it is evaluated and visualized.

SUNTROL LIVE

Suntrol live is the latest member of the Suntrol product family. It enables you to monitor and control your electricity production via a smartphone or tablet PC. But what makes Suntrol live really stand out is its real-time display of performance data and the control of loads via WLAN. This function enables you to further increase consumption of your own electricity and it also stores past statistics in the Suntrol portal at the same time. The application is directly connected to the Sunny WebBox, the communication interface between the inverter and router, via WLAN.

SUNTROL DATA LOGGER

The Suntrol data logger enables comprehensive monitoring of the solar power system. It is connected to the inverter via a RS485 interface or, optionally, via Bluetooth. It comes in three versions to suit systems of different size and scope.

SUNTROL DISPLAY

With the Suntrol display, you can conveniently display and check the performance, yields and CO₂ savings. The display visualizes the current performance data inside and outside a building.

SUNTROL MOBILE

Suntrol mobile gives you an overview of your solar power system's performance data and current yield situation 24/7, no matter where you are. There's a Suntrol mobile app for all Apple smartphones and tablet PCs and Android operating systems, and now there's even a web view for all smartphones.



Suntool² – Professional design software

The Suntool software was especially developed by SolarWorld for installers, planners, wholesalers and architects. With Suntool, you can plan solar power systems for virtually every roof surface in just a few minutes. Simply enter the desired system type, select the relevant mounting system and use the software to trace the available roof area for the solar power system. In just a few seconds, the program calculates the maximum possible number of solar modules as well as the amount of inverters required. The software also features detailed yield forecasts, result reports and a data sheet for kit planning. Regional irradiation data, cost and yield estimates are all included in the calculations. Regular updates can be accessed via the Internet and ensure that the program is always up-to-date.

Suntool now allows you to plan for two different performance classes (SW 196 poly and SW 245 poly) within one single solar power system.

PRODUCT BENEFITS

- » Uncomplicated system planning and yield calculation with professional planning software
- » Especially developed for installers, planners, wholesalers and architects
- » Quick and easy to use thanks to the user-friendly interface
- » Straightforward document generation and management for preparing quotes
- » Always up-to-date thanks to free Internet updates
- » Optional planning of two different performance classes within one single solar power system



Technical data

SYSTEM REQUIREMENTS

- > Windows XP or higher (Windows 7; Windows Server 2003 Service Pack 2; Windows Server 2008; Windows Server 2008 R2; Windows Vista Service Pack 1; Windows XP Service Pack 3)
- > .net Framework 4.0
- > Windows Installer 3.1 or higher
- > Internet Explorer 6.0 or higher
- > Processor: 1 GHz or higher
- > RAM: at least 1 GB
- > Hard drive: at least 100 MB free storage space
- > Screen resolution: at least 1024 x 786
- > Internet connection for updates

LICENSE TERMS

You must accept the license terms prior to using the Suntool software. They are displayed automatically when the CD starts. If you reject the contract, you can return the product and get your money back within two weeks after receiving the software. In such instances, you may not install or use the software.



SunpasS® – Individualized quality and performance documentation

SolarWorld quality is not only evident in their high-quality products, but also in the way entire projects are managed, from the planning and professional installation to the comprehensive documentation of all important system data. With SolarWorld, everything's available from a single source. For example, with the Sunpass folder in German, English or French, you can provide your customers with comprehensive, individual system documentation. And when they buy a SolarWorld kit, they'll receive all the necessary background information on the SolarWorld solar power system for free – everything from the individual components and detailed construction plans, data sheets and warranty agreements. The added value for your customers: With the Sunpass folder, your customers will always have access to their solar power system's performance data, also for potential requests from the sector or for maintenance. The Sunpass reflects your high-quality work – even after the system is installed.

PRODUCT BENEFITS

- » Individualized SolarWorld system documentation for your customers
- » All important documents are clearly organized according to DIN IEC 62446
- » System data compiled in advance to save time
- » Available as a practical folder or PDF document
- » Comprehensive documentation illustrating the quality of the work
- » Sustainably produced
- » Free delivery with each SolarWorld kit



Content

EACH SUNPASS INCLUDES THE FOLLOWING:

- > Concise documentation of the solar power system
 - > Customer letter
 - > Cover page with overview of essential system data
 - > Certificate from a specialist installer verifying a proper installation
 - > Individualized quality and performance documentation
 - > Data sheets
 - > Certification (including structural certificates)
 - > User information
 - > Warranty agreements
 - > Frame and cable plans
 - > Forms (yield data)
 - > Special insurance certificate (free for two years, can be extended to five years upon request)
 - > Additional record for all correspondence pertaining to the solar power system
-



Special insurance for solar power systems

Service from a single source: SolarWorld offers a customized insurance concept for all newly installed SolarWorld kits. The free special insurance is included with the kit at the system operator's request. In cooperation with the ERGO Insurance Group, SolarWorld has developed a safety concept that covers property damage to the solar power system as well as the associated risk of operational interruptions. Yield losses resulting from reduced performance are also covered. System operators can select between a two or five-year term and the insurance is free for the first two years. If it is extended to a five-year term, a reasonably priced one-off premium is charged for the additional three years. There is no minimum premium. SolarWorld is the policy holder; the system operator is also insured by a framework agreement and is the beneficiary in case of damage. This is how we save your customers the inconvenience of conducting complicated research and negotiations in advance. After the selected term has expired, the insurance expires without requiring termination.

PRODUCT BENEFITS

- » Available upon request for all newly installed SolarWorld kits
- » Individual insurance for solar power systems
- » Maximum security for your solar investment
- » Free two-year insurance coverage for the two or five-year term
- » No minimum premium
- » Quick and simple application process
- » Insurance expires automatically after the term expires



Targeted cover

A) THE ALL-RISKS INSURANCE

Covers unforeseeable property damage and insured objects lost through theft, burglary or looting. In particular, the insurance covers damage caused by:

- Operating errors, ineptitude or willful intent by third parties
- Short-circuit, overcurrent and overvoltage
- Failure of measuring, control or safety equipment
- Fire, lightning strike, explosion
- Water or moisture
- Storms, hail, frost, ice drift, flooding or snow load
- Animal bite

B) OPERATIONAL INTERRUPTION INSURANCE

Compensation for any lost electricity feed-in revenue if the functioning of the solar power system is interrupted or adversely affected by property damage or loss. The maximum compensatory payment is available as of the first day the system fails for maximum one year.

C) REDUCED YIELD INSURANCE

The reduced yield insurance offers unique extended coverage. A claim can be made if the level of the predicted annual energy yield is not reached by more than 10 percent due to insufficient solar irradiation.

D) CONSTRUCTION COVERAGE

This type of insurance is valid from the start of the installation phase, for maximum of 3 months. The construction coverage provides compensation for property damage caused by:

- A. Fire, lightning strike, explosion, impact or if an airplane crashes into the construction, or an airplane's parts or cargo fall from the sky.
- B. Storm or hail and loss due to theft of insured components securely connected to the building and burglary of securely stored, insured items.

Requirements for the insurance:

- All details regarding the installer and system operator must be included in the documentation at the time the order is placed.
 - Purchase of a complete SolarWorld kit or a SunCarport
-



SUNCHARGER® – Solar power system for your pocket



The SolarWorld SunCharger is the world's first mobile device to combine a power supply, battery and solar generator in one. Cell phones, cameras and MP3 players obviously require power when you take them with you on vacation or business trips. SunCharger supplies power at all times, eliminates the need to carry around many different chargers and extends the operating time of your smartphone. Its integrated solar cell generates climate-friendly power, which allows you to power mobile devices using a USB cable. The high-performance silicon cells fitted on top of the device charge the SunCharger battery on demand and at any time. You can increase the solar cell area by opening the sliding device. SunCharger is your high-quality companion for a green lifestyle. Its modern design has even been honored with a red dot design award. Generate your own climate-friendly solar power and never go without a power supply – those are the benefits of the SolarWorld SunCharger.

PRODUCT BENEFITS

- >> 3 in 1 – SunCharger is a power supply, additional battery and solar charger
- >> Carry in place of your normal basic charger – you can use it anywhere, any time
- >> Independence from the public grid
- >> USB connection ensures compatibility with a wide range of devices
- >> Green lifestyle product



Technical data

DETAILS

<i>Dimensions (W x H x D)</i>	78 x 115 x 23.8 mm
<i>Weight</i>	200 g
<i>Solar cell area</i>	10,470 mm ²
<i>Input voltage</i>	100–240 V~/ 50–60 Hz / 130 mA
<i>Output voltage</i>	5 V
<i>Output current</i>	500 mA to 600 mA according to USB specifications
<i>Internal battery capacity</i>	≥ 1200 mAh
<i>Rated battery voltage</i>	3.7 V
<i>Operating temperature</i>	0°C to +40°C
<i>Certification</i>	VDE-tested, IEC 60950-1



reddot design award
winner 2012



Find out more

Do you have any questions about SolarWorld's quality standards or individual products? Then don't hesitate to contact us. We will gladly provide you with additional information and show you exactly how SolarWorld can prepare you for the solar future today.

SIMPLY CALL US OR SEND US AN EMAIL:

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We turn sunlight into power.