

SMA SUNNY MINI CENTRAL

A solar energy system is only as good as its inverter. It manages the system and is thus a central element in delivering your solar yields. The unlimited number of combination possibilities makes the Sunny Mini Central suitable for solar energy systems from 15 kW to well above 100 kW.

Phoenix Solar offers you the greatest possible security for your investment: In addition to the quality control carried out by the manufacturer, a Phoenix Solar technical team also performs stress tests on all products. Random samples of Sunny Mini Central inverters are tested for reliability and performance – providing the best possible security for your power yields!



The advantages at a glance:

- Tested in a RAL certified process, independent of the manufacturer
- Experienced market leader in Germany and worldwide
- Highest levels of efficiency, sometimes over 98 %
- Wide temperature range (-25 °C to +60 °C)
- A weatherproof, dustproof, and rust-free housing allows trouble-free use outdoors and under extreme conditions
- The ESS (Electronic Solar Switch) integrated into the device allows safe isolation of the solar modules from the inverter
- 5 year product guarantee* – optionally extendable to 10 years
- 24-hour replacement service and customer hotline

*The guarantee conditions of the manufacturer apply

Experience pays off

Phoenix Solar or your local Phoenix Solar partner chooses the optimal inverter to suit your solar energy system. All our sales partners are highly competent, with years of experience in solar technology, and are selected by us using the strictest quality criteria.

PERMANENT SECURITY – EVERY SOLAR CENT COUNTS

The investment volume for larger solar power plants means that yields need to be as secure as possible. Any faults occurring should be able to be solved by an automatic operation monitoring system, even for very remote systems. Today's modern technology makes remote monitoring child's play. If necessary, even from the other side of the planet.

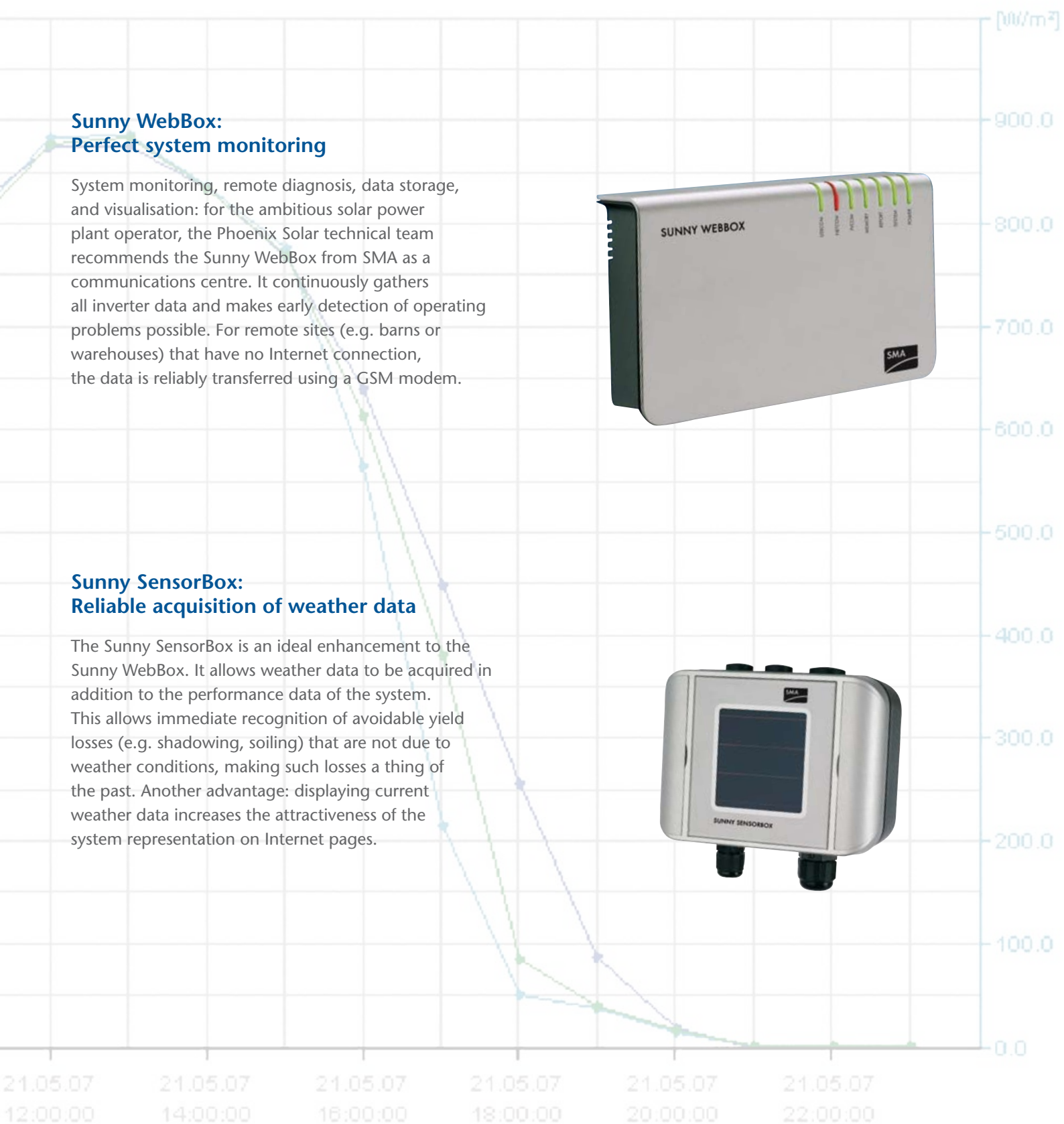
Sunny WebBox: Perfect system monitoring

System monitoring, remote diagnosis, data storage, and visualisation: for the ambitious solar power plant operator, the Phoenix Solar technical team recommends the Sunny WebBox from SMA as a communications centre. It continuously gathers all inverter data and makes early detection of operating problems possible. For remote sites (e.g. barns or warehouses) that have no Internet connection, the data is reliably transferred using a GSM modem.



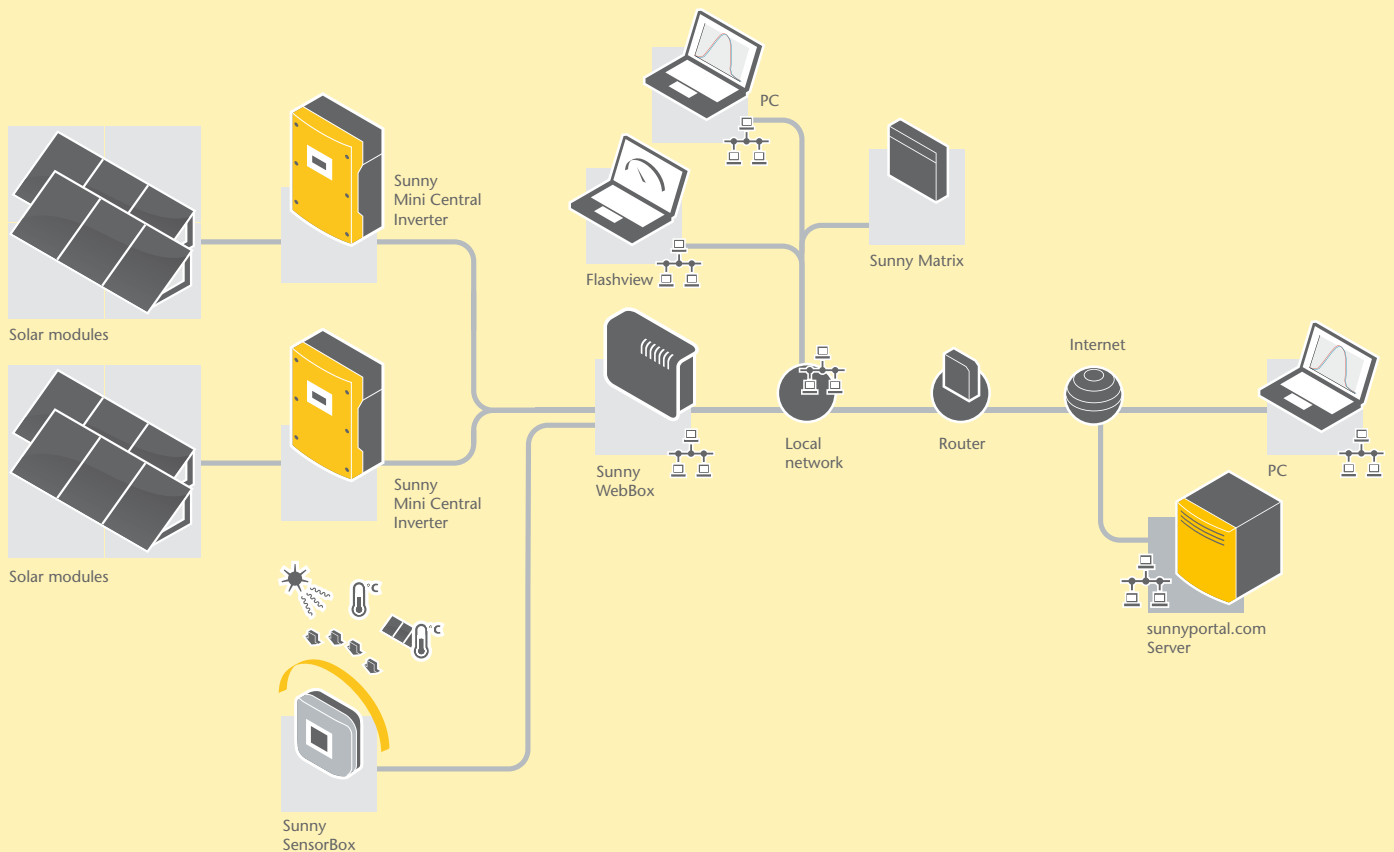
Sunny SensorBox: Reliable acquisition of weather data

The Sunny SensorBox is an ideal enhancement to the Sunny WebBox. It allows weather data to be acquired in addition to the performance data of the system. This allows immediate recognition of avoidable yield losses (e.g. shadowing, soiling) that are not due to weather conditions, making such losses a thing of the past. Another advantage: displaying current weather data increases the attractiveness of the system representation on Internet pages.



Perfect connection: The direct link to your system

The diagram shows how simple the monitoring and data acquisition of your system is. With quality components perfectly matched to each other you always have an overview of the current yields.



The advantages of the Sunny WebBox:

- Early detection of operational faults, also for very remote systems
- Data storage for analysis, e.g. using Microsoft Excel
- Diagnosis and system monitoring using any PC: Windows, Linux & Mac OS
- Automatic data transfer
- Optional internal analogue modem or GSM modem
- Storage expansion and data transfer to a PC using an exchangeable SD card
- Monitoring of up to 50 inverters
- Free data preparation and graphic presentation in the Internet

The advantages of the SensorBox:

- Comprehensive performance analysis of the solar power plant
- Data acquisition of irradiation and module temperature (optionally also wind speed and outside temperature)
- Compatible with the Sunny WebBox
- Analysis of the data on a PC
- Simple integration into existing systems

SMA Sunny Mini Central inverters

The following table provides an overview of all the technical data of the individual Sunny Mini Central inverters:

Model description	SMC 4600A	SMC 5000A	SMC 6000A	SMC 6000 TL	SMC 7000 HV	SMC 7000 TL	SMC 8000 TL	SMC 9000 TL	SMC 10000 TL	SMC 11000 TL
Material number	100933	100916	100917	100919	100920	100921	100922	100923	100924	100925
Max. DC power (W)	5250	5750	6300	6200	7500	7200	8250	9300	10350	11400
Min. MPP voltage (V)	246	246	246	333	335	333	333	333	333	333
Max. MPP voltage (V)	480	480	480	500	560	500	500	500	500	500
Max. DC voltage (V)	600	600	600	700	800	700	700	700	700	700
Max. DC current (A)	26	26	26	19	23	22	25	28	31	34
Rated AC power (Wp)	4600	5000	6000	6000	6650	7000	8000	9000	10000	11000
Max. AC power (Wp)	5000	5500	6000	6000	7000	7000	8000	9000	10000	11000
Max. efficiency (%)	96.10	96.10	96.10	98.00	96.10	98.00	98.00	98.00	98.00	98.00
European efficiency (%)	95.20	95.20	95.20	97.70	95.30	97.70	97.70	97.60	97.50	97.50
Transformer	yes	yes	yes	no	yes	no	no	no	no	no
Weight (kg)	62	62	63	31	65	32	33	35	35	35
Width (mm)	468	468	468	468	468	468	468	468	468	468
Height (mm)	613	613	613	613	613	613	613	613	613	613
Depth (mm)	242	242	242	242	242	242	242	242	242	242
IP protection degree	65	65	65	65	65	65	65	65	65	65
Temperature range (°C)	- 25 to + 60° C for all inverters									
Number of strings	4	4	4	4	4	4	4	5	5	5
Multi-Contact™	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
AC plug	no	no	no	no	no	no	no	no	no	no
ESS (Electronic Solar Switch)	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Availability (certified)	BE/DE/ES/ FR/GR/UK	BE/DE/ES/ FR/GR/UK	BE/DE/ES/ FR/GR/UK	DE/FR/GR	BE/DE/ FR/GR/UK	DE/FR/GR	DE/FR/GR	DE/FR/GR	DE/FR/GR	DE/FR/GR
Limited availability*	LU/NL	LU/NL	LU/NL	BE/ES/LU/NL	ES/LU/NL	BE/ES/LU/NL	BE/ES/LU/NL	BE/ES/LU/NL	BE/ES/LU/NL	BE/ES/LU/NL

* For further information please get in contact with your local partner.
Source: SMA, subject to errors and technical modifications

BE = Belgium
DE = Germany

ES = Spain
FR = France

GR = Greece
LU = Luxembourg

NL = Netherlands
UK = United Kingdom

The manufacturer SMA Technologie

SMA Technologie AG was founded in 1981. As one of the leaders in the solar technology market, SMA sells inverters for various sizes of solar energy systems. With the innovative string technology used in their products, the German company has developed from a pioneer of

solar system technology into a world market leader. The range of inverter products is enhanced by modern communications technology allowing continuous system monitoring and presentation of the yields and the CO₂ savings.