SUNNY MATRIX

Robust
- > Die-cast aluminum enclosure for outdoor installation
- > Durable front panel print

Flexible
- > Individual design for front transfer
- > Different housing sizes for any application
- > Texts can be freely edited and displayed
- > Changing displays by means of innovative day / night switching

User-friendly
- > Easy set-up, operation and remote maintenance through Web interface
- > Automatic data synchronization with Sunny WebBox
- > Automatic brightness control of the LEDs
- > Automatic ticker function for longer lines of text

SUNNY MATRIX

Custom-tailored large-format display for indoor and outdoor use

All solar energy yield parameters at a glance: the robust large-format display Sunny Matrix visualizes yield, performance and CO_2 reduction of PV systems in large luminous figures. Sunny Matrix derives the display data automatically from the Sunny WebBox via the Ethernet interface: either through the local network or via the Internet - from any location in the world. If the solar power system is fitted with a Sunny SensorBox, the local weather data recorded there will also be available for display. Various enclosure formats, no restriction on layout of text modules, and variable numbers of lines and characters are features which make the Sunny Matrix the ideal information board for solar power systems.

SUNNY MATRIX

Individual presentation of PV systems

If on the roof of the city hall or a school, a company's headquarters or production building: With a solar power system, the operator contributes an important share to protecting the environment. This commitment is impressive – with a Sunny Matrix from SMA.

The weatherproof large-format display presents all important data of your PV system such as current output, daily yield or the amount of CO_2 saved. In combination with the Sunny SensorBox even wind, temperature and irradiation data can be displayed.

Everything is individually packed: thanks to the freely editable front panel, the modern metal enclosure has a unique design as desired by the system operator. Simply send the template to SMA – our designers take care of all further steps. The advantage for you being a trade specialist: upon consultation it is also possible to integrate the contact data of your company. This increases your level of awareness in your sales region and guarantees subsequent orders.

Our customers have the choice

With three different enclosure sizes, Sunny Matrix offers the optimal solution for all demands. The (up to four) text displays can be positioned virtually anywhere. And as you desire, the displays have four, eight, twelve or sixteen characters. Especially important: the customer decides what to present. The content is freely editable and can be displayed as free text or automatic ticker text.

And after sunset, when the PV system is producing no electricity any more? Then the operator can rely on the automatic day/night switching. The current performance
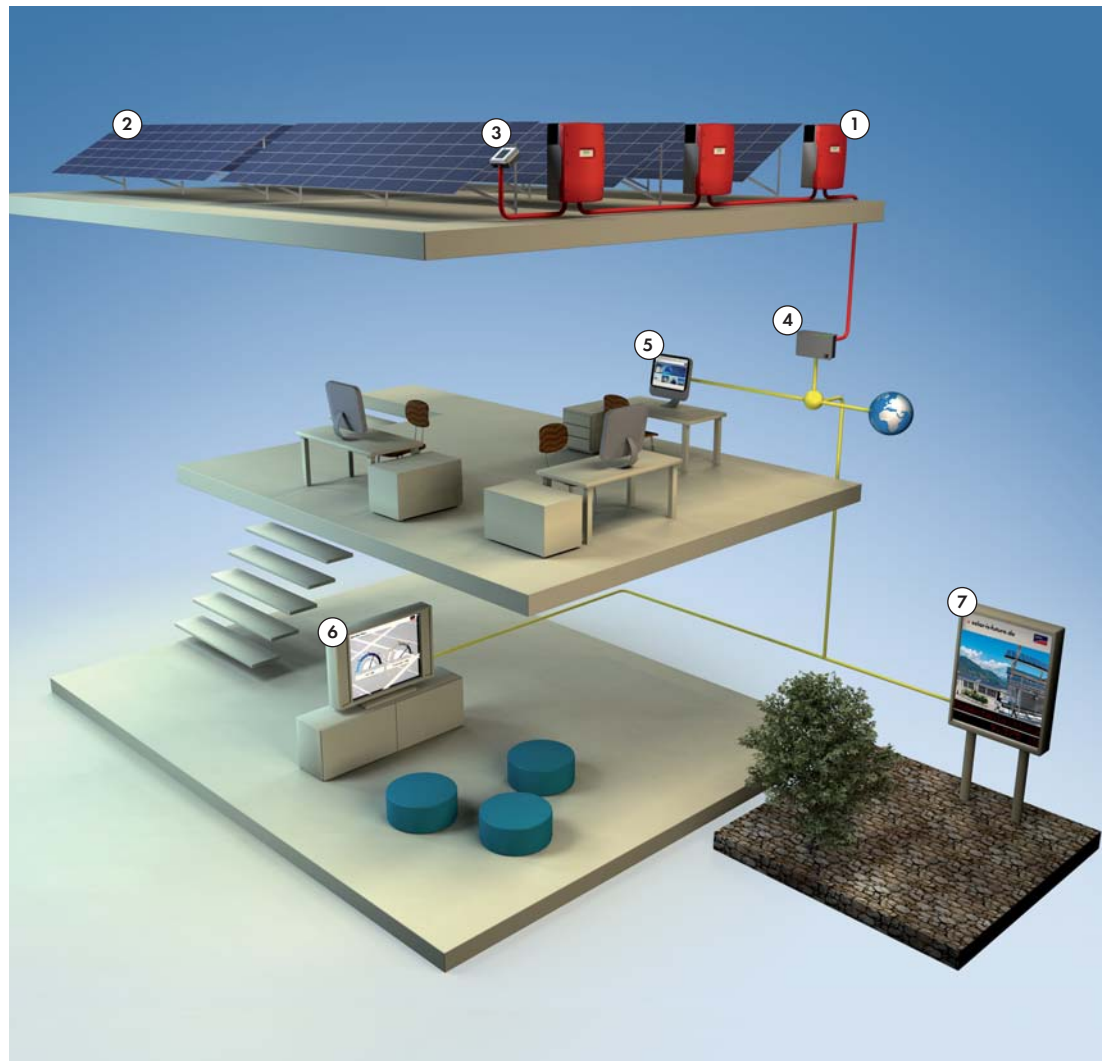
Typical
system design

Electricity generation

① SUNNY MINI CENTRAL
② Solar generator

System Monitoring

③ SUNNY SENSORBOX
④ SUNNY WEBBOX
⑤ SUNNY PORTAL
⑥ FLASHVIEW
⑦ SUNNY MATRIX

▬▬ RS485
▬▬ Local network / Internet

is hidden and individual advertising messages and/or the system data of the day occur in neon signs. Therefore it is an attractive advertising medium for every company.

Innovative technology easy to operate

Sunny Matrix is connected to the PV system via the Sunny WebBox. To ensure this, the devices have an Ethernet connection. The data logger Sunny WebBox continually collects all data of the PV inverters and provides the Sunny Matrix with the necessary system values. The amount of CO_2 savings is automatically calculated. The advantage: once installed, the Sunny Matrix functions without any further effort by the system operator.

The integrated Web server of the Sunny Matrix enables an uncomplicated remote operation: The commissioning and

the display settings are done via the web interface. To do this, simply connect the PC via the Internet to the web server of the Sunny Matrix, enter the data – ready! Subsequent change requests are therefore easily to implement – and this without being on-site.

Perfect equipment – long lifetime

If in sunny and hot conditions or in cold and rainy conditions: the Sunny Matrix is prepared for any weather. The robust aluminum enclosure offers the electronics solid protection. Thus, the system operator can freely choose the location for his Sunny Matrix. At the same time, the high quality materials guarantee a very long lifetime. System operators, employees and interested visitors are exactly informed about the PV system yields, day by day.

Technical Data
SUNNY MATRIX

	SUNNY MATRIX
Communication	
Data logger communication	Ethernet
Interfaces	
Ethernet	10/100 Mbit, RJ45
Max. number of devices	
Ethernet (Sunny WebBox)	50
Max. communication range	
Ethernet	100 m
Power supply	
Input voltage	100 V – 240 V AC, 50 / 60 Hz
Power consumption	Normally 20 W + 5 W per 4-character display module
Max. current consumption	1.3 A
Environmental conditions in operation	
Ambient temperature range	–25 °C to +60 °C
Protection rating	IP54
General data	
Dimensions (W / H / D) in mm	800 / 400 / 120, 800 / 800 / 120, 800 / 1000 / 120
Weight	15 kg, 20 kg, 25 kg
Installation site	outdoor
Deployment options	Wall mounting
Character height	51 mm
Length of lines	4, 8, 12 or 16 characters
Number of lines	max. 2 lines (400 mm model) up to 4 lines (800/1000 mm model)
Line layout	Positioning to customer specification
Panel design	according to customer specification
Language versions - software / manual	German, English, Italian, Spanish, Dutch, Portuguese, French
Features	
Operation	integrated Web server (Internet browser)
Warranty	5 years
Certificates and approvals	www.SMA.de
Information displayed	
General information	Time, date, personal text, personal web text
System data	Current output, daily yield, total yield, CO_2 savings
Sunny SensorBox data	Ambient temperature, module temperature, internal solar irradiation, wind speed
Sunny Island data	Battery charge level
Accessories	
Optional software	Sunny Matrix Admin Tool

Presentation of system performance with high public appeal for indoor or outdoor application

Automatic data synchronization with Sunny WebBox

Practically unlimited choice of position and length of **text modules**

Integrated web server for set-up, operation and remote maintenance from any web-enabled PC in the world

Three different **enclosure sizes**

Display of wind, temperature and irradiation data in combination with the Sunny SensorBox

Individual design of front panel according to your specifications

Changing displays, freely editable and ticker text, automatic night switching