

Webinar
SUNNY TRIPOWER CORE2



Safety information and liability



Our goal is to enable you to install and maintain your SMA products and solutions as accurately and efficiently as possible through technically flawless information.

Prior to the training, however, we must point out that we provide the training as-is and do not assume any liability whatsoever. SMA expressly disclaims any statutory warranties, warranties, conditions and obligations of any kind, whether express or implied, statutory or otherwise, including, without limitation, greater securities and implied warranties of merchantability, commercial viability or fitness for a particular purpose. [Also refer to our Terms and Conditions of Participation: https://www.sma.de/solar-academy/teilnahmebedingungen/.](https://www.sma.de/solar-academy/teilnahmebedingungen/)

For the sake of your own safety, you are asked to comply with the trainer's instructions at all times during the training and to approach technical equipment only with due caution. When you participate in hands-on training exercises, we assume that you have completed vocational training in electrical engineering and are aware of the risks associated with working on electrical devices.

Please note that the training content provided to you can be valid only for a certain period of time. When you work on SMA products and solutions after the training, we expect you to always consult the latest technical documentation, for example, installation manuals, maintenance manuals, etc., in case updates have been made in the meantime.

Should you have any questions or comments regarding the health and safety measures and precautions, we expect you to address them immediately.

We hope you enjoy the training.

SMA String Inverters for Commercial Solutions



Inverter



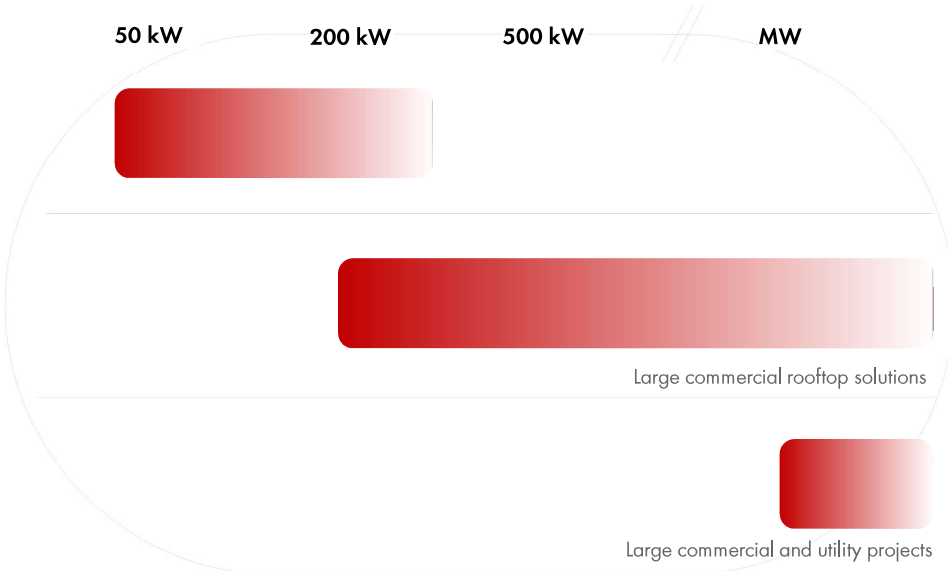
STP CORE1






New STP CORE2



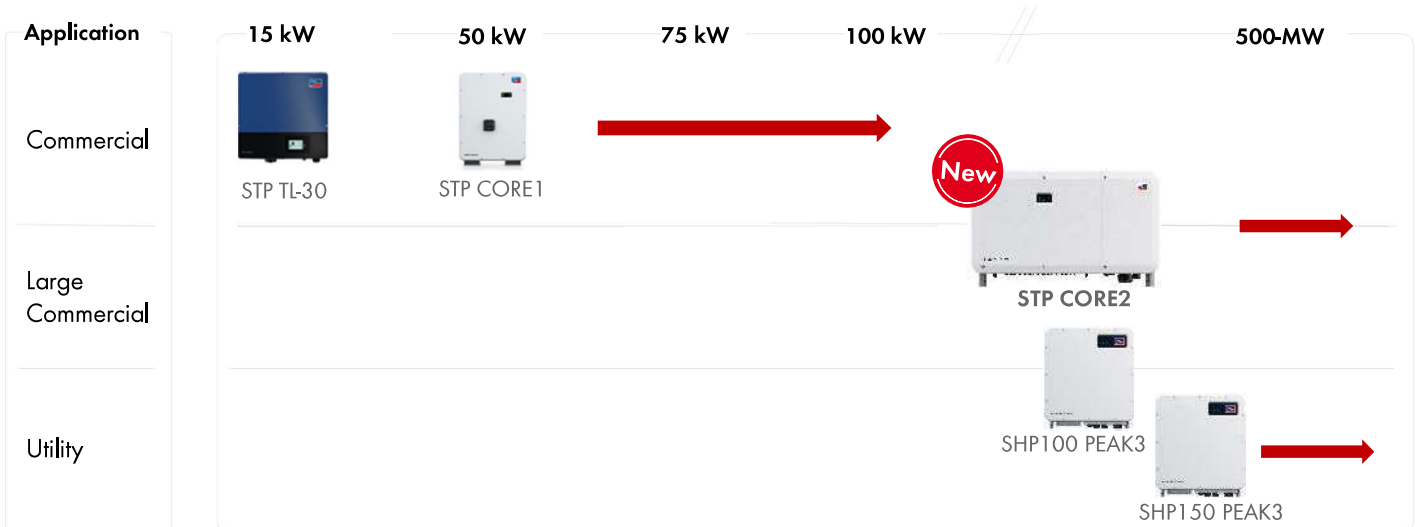
SHP PEAK3



Application



Complete portfolio for commercial systems



New SUNNY TRIPOWER CORE2



More options + more integration + more performance = more profit.

SUNNY TRIPOWER CORE2 is designed to make your life easier and increase your and your customers' profits.



More options.

Most flexible plant design for commercial and large commercial solutions, for both ground mount and rooftop plants.



More integration.

Core part of SMA Energy System Business and ennexOS, ready for future business.



More performance.

Out-of-the-box solution with integrated PV performance optimization ensures efficient installation and service.



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More Options

Highest flexibility in plant design

- 12 MPP trackers for maximum design flexibility
- 24 strings with Sunclix connectors
- Up to 150% over-dimensioning of PV array
- Up to 1,100 VDC
- Bifacial modules supported



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More Integration

The core of SMA Energy System Business

- Complete ennexOS integration and easy plant commissioning via DATA MANAGER M and monitoring with SUNNY PORTAL powered by EnnexOS.
- SMA services (e.g. Online Service Center)
- Leading planning tool SUNNY DESIGN.
- Seamless extension for further use cases, e.g. storage solutions like STORAGE BUSINESS*.

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More Performance

Highest power and maximum yields

- Out-of-the-box installation concept saves time and money
- No DC combiner required
- 110 kW with standard 400 VAC
- High environmental resistance
- Fast plant commissioning (with Data Manager M)
- Integrated features SMA ShadeFix

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Best choice for EPC and installers.

- Leading planning tool SUNNY DESIGN with brand new features (visual roof planning with Google for example)
- System designing process easier and more efficient – even on challenging sites.
- Ideal solution for medium to large commercial projects : means less risk for warehousing
- Outstanding SMA quality
- SMA's services ensure efficient assurance of maximum yields from the PV plants:

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Best choice for distributors.

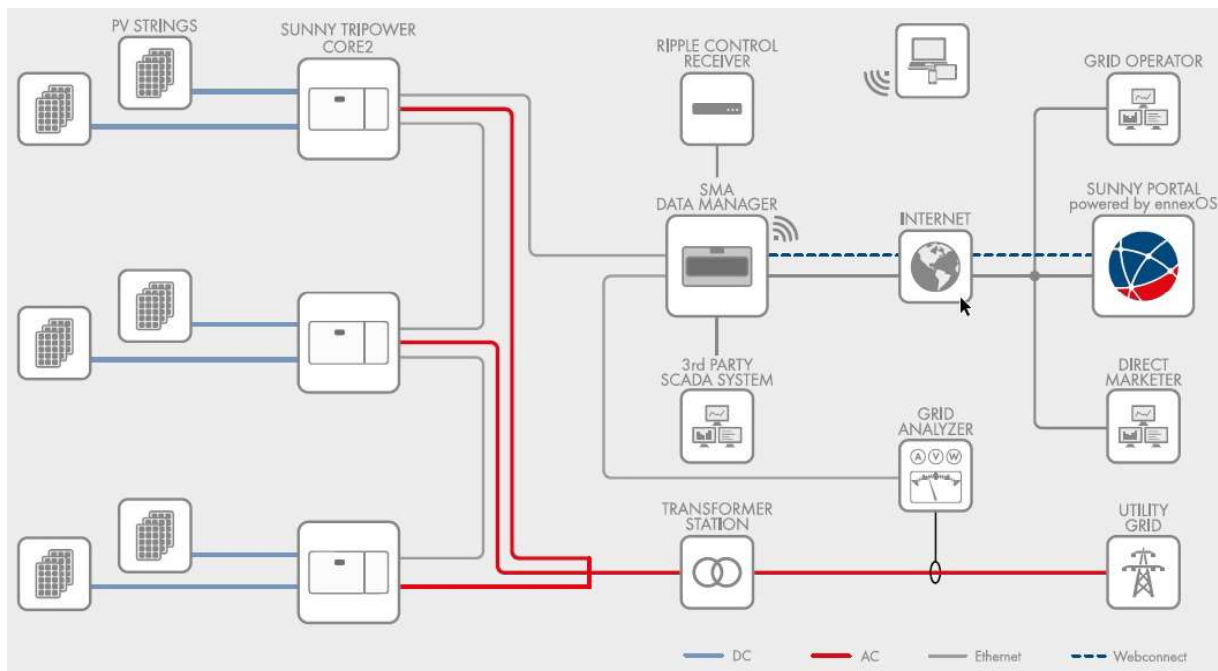
- Ideal solution for all medium to large commercial projects : means so less risk for warehousing.
- Direct support and a range of smart services make SMA your go-to PV experts.
- We provide top quality developed in Germany – delivered right on time thanks to our reliable supply chains

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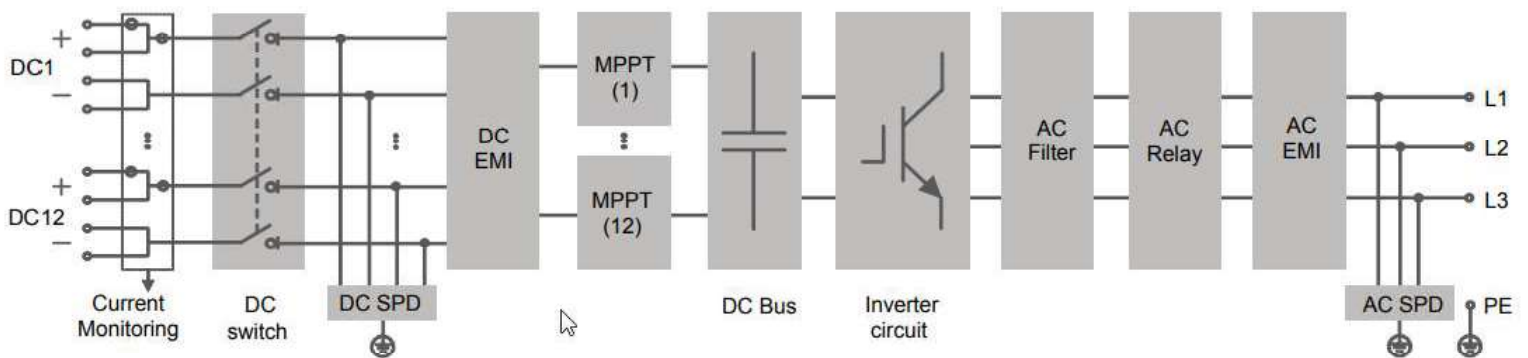
Technical data



PV plant system setup



Block diagram CORE2



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Technical data

Input (DC)

- MPP voltage range: 500 V to 800 V
- Min. input voltage / Start input voltage: 200 V / 250 V
- Max. input voltage: 1 100 V
- Max. input current per MPP tracker / Max. short-circuit current per MPP tracker: 26 A / 40 A
- Number of independent MPP trackers / Strings per MPP tracker: 12 / 2 (Total 24 inputs)
- Max. PV array power: 165kWp (up to 50% overloading possible on DC side)

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Technical data

Output (AC)

- Max. apparent AC power: 110 kVA
- Nominal AC voltage / AC voltage range: 400 V / 320V to 460V
- AC grid frequency: 50/60 Hz
- Max. output current: 159 A
- Max. efficiency / European efficiency: 98,6 % / 98,4 %
- Power factor range: 0.8 leading to 0.8 lagging
- AC connection: L1/L2/L3/PE (no neutral connection required)

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Technical data

Protective devices

- DC disconnection device (4 DC switches / One switch for three MPPTs)
- Ground fault monitoring
- Grid monitoring
- DC reverse polarity protection
- All-current sensitive residual-current monitoring unit
- Monitored AC and DC surge arresters (type II)

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Technical data

General data

- Dimensions (W / H /D): 1117 mm / 682 mm / 363 mm (44,0 in / 26,9 in / 14,3 in)
- Weight: 93,5 kg (206,1 lb)
- Operating temperature range: $-30\text{ }^{\circ}\text{C}$ to $+60\text{ }^{\circ}\text{C}$ ($-22\text{ }^{\circ}\text{F}$ to $+140\text{ }^{\circ}\text{F}$)
- Noise emission, typical: $< 65\text{ db(A)}$
- Self-consumption (at night): $< 5\text{ W}$

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Technical data (selection)

Features / functions

- DC connection / AC connection: Sunclix / terminal lug (70 to 240 mm² Al or Cu)
- LED indicator lights (Status / Fault / Communication)
- Ethernet interface: 2 Ports (RJ45)
- Data interface: Web Interface / Modbus
- Mounting type: Wall mounting / rack mounting
- Warranty: 5 years (optional 10 / 15 / 20 years)