



SIGENERGY

Home Energy Solution

Let the world enjoy green energy



Sigenergy focuses on developing cutting-edge home and business energy solutions, with products ranging from energy storage systems to solar inverters and EV chargers. Our world-class R&D team of hundreds of top industry experts shares the vision of making the world greener via continuous innovation. With global sales and services, we aim to become our customers' most trusted partner on their journey to a more sustainable future.

www.sigenergy.com

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ABOUT SIGENERGY

Sigenergy focuses on developing cutting-edge home and business energy solutions, with products ranging from energy storage systems to solar inverters and EV chargers. Our world-class R&D team of hundreds of top industry experts shares the vision of making the world greener via continuous innovation. With global sales and services, we aim to become our customers' most trusted partner on their journey to a more sustainable future.

VISION Enjoy Green Energy

MISSION
Be a distributed energy pioneer.
Build intelligent energy solutions with superior safety, ultra simplicity, and outstanding performance.

SIGEN

Safe **I**ntelligent **G**reen **E**fficient **N**ew

SIGENERGY HOME ENERGY SOLUTION

Combining solar, storage and EV charging, Sigenergy offers an all-in-one Home Energy Solution that helps you lower utility bill and reliance on the grid. Simple to install, easy to use, smart & safe all around, our system is versatile and scalable to meet every need.

Let numbers talk Sigenergy is raising industry standards

15 mins

stackable installation

5 layers

battery protection

280 Ah

long cycle-life battery cell

0 ms

load-side disruption

5 mins

fast commissioning

5 layers

system protection

V2X

bi-directional charging

1-click

full system diagnosis



Simple



Versatile

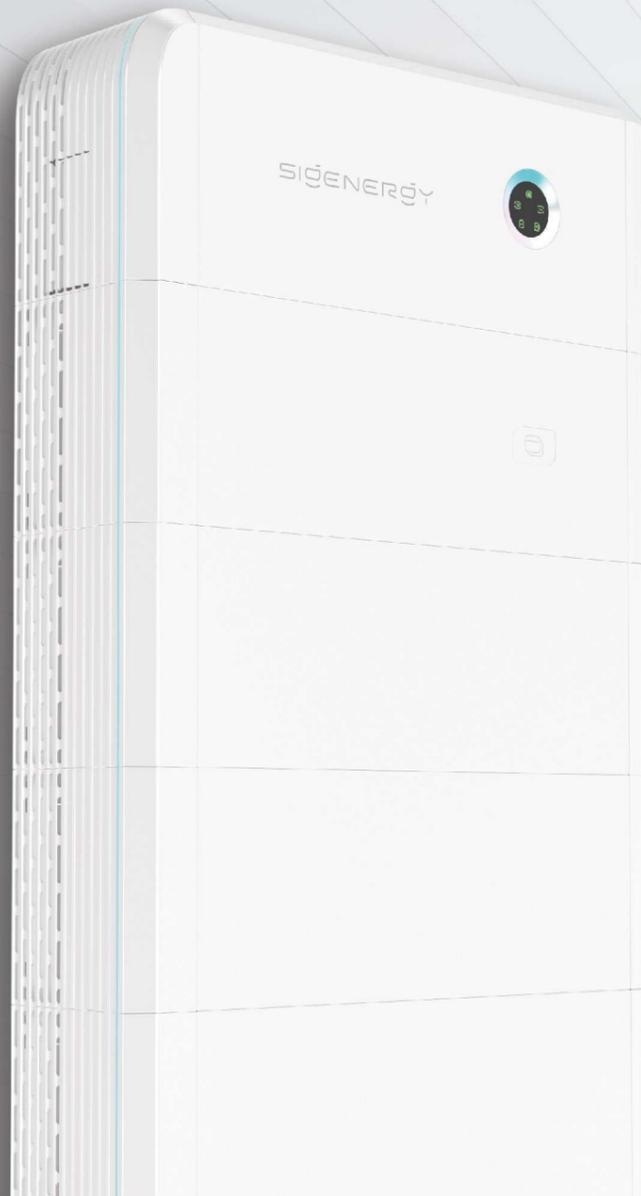


Robust



Intelligent





▶ **Sigen Energy Controller**
for solar + energy storage system

▶ **Sigen EV DC Charging Module**
Ready for V2X

▶ **Sigen Battery**

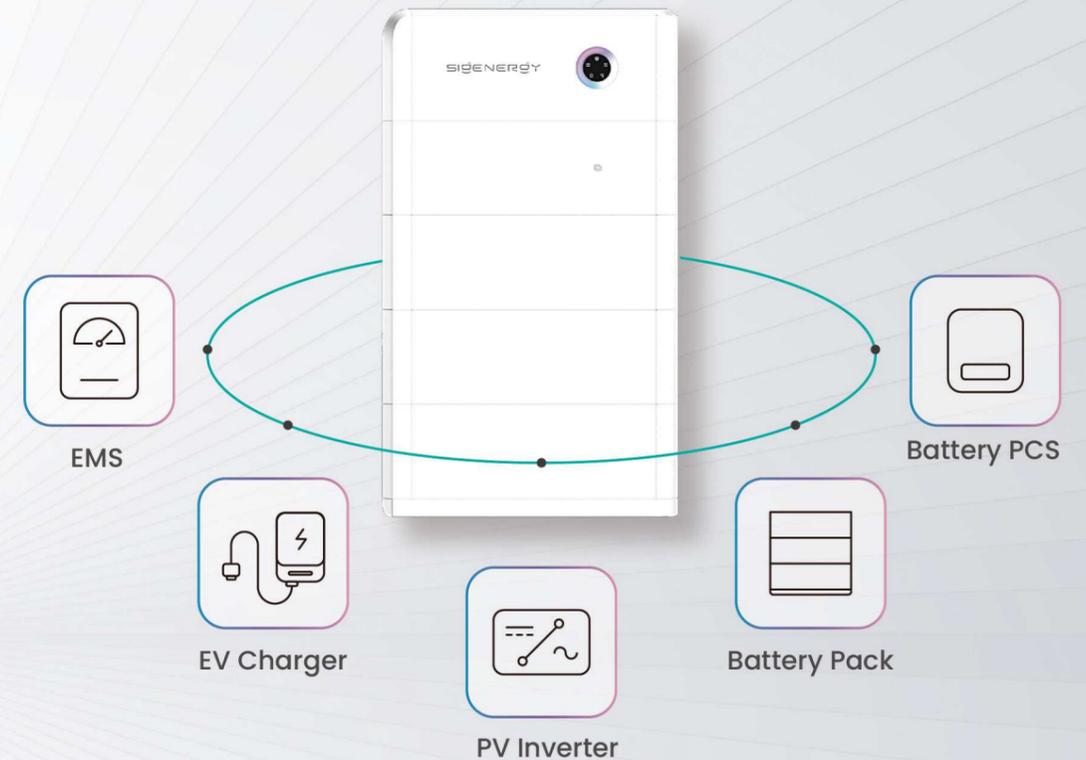
8.0 **5.0**
Energy capacity(kWh)

1 – 6
batteries stackable for per stack

5 kWh – 48 kWh
energy capacity range for per stack

Multiple
systems supported in parallel connection

5-in-One, highly integrated design



Sigenergy is leading a new way of producing, storing, transferring, and consuming home energy. We provide a genuine all-in-one solar energy storage system, SigenStor. Its unique 5-in-One modular design integrates Solar Inverter, EV DC Charger, Battery PCS, Battery Pack, and EMS into one intelligent home energy system. Simple, robust and versatile, it will be a great addition to your home.

Start small, grow on demand

| | | | | | | |
|----------------------------|-------|--------|--------|--------|--------|--------|
| | | | | | | |
| Controller | x 1 | x 1 | x 1 | x 1 | x 1 | x 1 |
| Battery | x 1 | x 2 | x 3 | x 4 | x 5 | x 6 |
| Max. Total Energy Capacity | 8 kWh | 16 kWh | 24 kWh | 32 kWh | 40 kWh | 48 kWh |



Sigen Energy Controller

3.0 – 6.0 kW Single Phase
5.0 – 25.0 kW Three Phase

- EMS inside for precise control
- DC ground-fault protection
- Multi-source black start
- On & off-grid compatibility
- DC/AC ratio up to 2 (single phase)
- IP66 system protection rating

Sigen Energy Controller 3.0–6.0 kW Single Phase

| SigenStor EC | 3.0 SP | 3.6 SP | 4.0 SP | 4.6 SP | 5.0 SP | 6.0 SP | Units | |
|---|--------|--------|--------|--------|--------|--------|---|-----|
| DC Input (from PV) | | | | | | | | |
| Max. PV power | 6000 | 7360 | 8000 | 9200 | 10000 | 12000 | W | |
| Max. DC input voltage | | | | | | | 600 | V |
| Nominal DC input voltage | | | | | | | 350 | V |
| Start-up voltage | | | | | | | 100 | V |
| MPPT voltage range | | | | | | | 50 ~ 550 | V |
| Number of MPP. trackers | | | | | | | 2 | |
| Number of PV strings per MPPT | | | | | | | 1 | |
| Max. input current per MPPT | | | | | | | 16 | A |
| Max. short-circuit current per MPPT | | | | | | | 20 | A |
| AC Output (on-grid) | | | | | | | | |
| Nominal output power | 3000 | 3680 | 4000 | 4600 | 5000 | 6000 | W | |
| Max. output apparent power | 3300 | 3680 | 4400 | 5000 | 5500 | 6600 | VA | |
| Nominal output current | 13.6 | 16.0 | 18.2 | 20.9 | 22.7 | 27.3 | A | |
| Max. output current | 15.0 | 16.0 | 20.0 | 22.7 | 25.0 | 30.0 | A | |
| Nominal output voltage | | | | | | | 220 / 230 / 240 | V |
| Nominal grid frequency | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total current harmonic distortion | | | | | | | THDi < 2% | |
| Efficiency | | | | | | | | |
| Max. efficiency | | | | | | | 98.0% | |
| European efficiency | 97.0% | 97.1% | 97.2% | 97.3% | 97.4% | 97.4% | | |
| AC Output (backup) | | | | | | | | |
| Peak output power (10 seconds) | 4500 | 5520 | 6000 | 6900 | 7500 | 9000 | W | |
| Nominal output voltage | | | | | | | 220 / 230 / 240 | V |
| Nominal output frequency | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total voltage harmonic distortion | | | | | | | THDv < 2% | |
| Disruption time of backup switch ¹ | | | | | | | 0 | ms |
| Battery Connection | | | | | | | | |
| Battery module models | | | | | | | SigenStor BAT 5.0 / 8.0 | |
| Number of modules per controller | | | | | | | 1 ~ 6 | pcs |
| Battery module voltage range | | | | | | | 300 ~ 600 | V |
| Protection | | | | | | | | |
| Safety protection feature | | | | | | | DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection, Insulation monitoring, Residual current monitoring, DC/AC surge protection | |
| General Data | | | | | | | | |
| Dimensions (W / H / D) | | | | | | | 700 / 300 / 245 | mm |
| Weight | | | | | | | 18 | kg |
| Storage temperature range | | | | | | | -40 ~ 70 | °C |
| Operating temperature range | | | | | | | -30 ~ 60 | °C |
| Relative humidity range | | | | | | | 0% ~ 95% | |
| Max. operating altitude | | | | | | | 4000 | m |
| Cooling | | | | | | | Natural convection | |
| System ingress protection rating | | | | | | | IP66 | |
| Communication | | | | | | | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) | |
| Standard Compliance | | | | | | | | |
| Standard ² | | | | | | | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2 | |

- This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.
- For all standards refer to the certificates category in the Sigenenergy website.

Sigen Energy Controller 5.0–25.0 kW Three Phase

| SigenStor EC | 5.0 TP | 6.0 TP | 8.0 TP | 10.0 TP | 12.0 TP | 15.0 TP | 17.0 TP | 20.0 TP | 25.0 TP | Units | | |
|---|--------|--------|--------|---------|---------|---------|---------|---------|---------|-------|---|-----|
| DC Input (from PV) | | | | | | | | | | | | |
| Max. PV power | 8000 | 9600 | 12800 | 16000 | 19200 | 24000 | 27200 | 32000 | 40000 | W | | |
| Max. DC input voltage | | | | | | | | | | | 1100 | V |
| Nominal DC input voltage | | | | | | | | | | | 600 | V |
| Start-up voltage | | | | | | | | | | | 180 | V |
| MPPT voltage range | | | | | | | | | | | 160 ~ 1000 | V |
| Number of MPP. trackers | 2 | | | 3 | | | 4 | | | | | |
| Number of PV strings per MPPT | | | | | | | | | | | 1 | |
| Max. input current per MPPT | | | | | | | | | | | 16 | A |
| Max. short-circuit current per MPPT | | | | | | | | | | | 20 | A |
| AC Output (on-grid) | | | | | | | | | | | | |
| Nominal output power | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 | 17000 | 20000 | 25000 | W | | |
| Max. output apparent power | 5500 | 6600 | 8800 | 11000 | 13200 | 16500 | 18700 | 22000 | 27500 | VA | | |
| Nominal output current | 7.6 | 9.1 | 12.2 | 15.2 | 18.2 | 22.8 | 25.8 | 30.4 | 38.0 | A | | |
| Max. output current | 8.4 | 10.0 | 13.4 | 16.7 | 20.1 | 25.1 | 28.4 | 33.4 | 41.8 | A | | |
| Nominal output voltage | | | | | | | | | | | 380 / 400 | V |
| Nominal grid frequency | | | | | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total current harmonic distortion | | | | | | | | | | | THDi < 2% | |
| Efficiency | | | | | | | | | | | | |
| Max. efficiency | 98.1% | 98.2% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | | | |
| European efficiency | 96.1% | 96.6% | 97.1% | 97.5% | 97.7% | 97.9% | 97.9% | 97.9% | 98.0% | | | |
| AC Output (backup) | | | | | | | | | | | | |
| Peak output power (10 seconds) | 7500 | 9000 | 12000 | 15000 | 18000 | 22500 | 25500 | 30000 | 30000 | W | | |
| Nominal output voltage | | | | | | | | | | | 380 / 400 | V |
| Nominal output frequency | | | | | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total voltage harmonic distortion | | | | | | | | | | | THDv < 2% | |
| Disruption time of backup switch ¹ | | | | | | | | | | | 0 | ms |
| Battery Connection | | | | | | | | | | | | |
| Battery module models | | | | | | | | | | | SigenStor BAT 5.0 / 8.0 | |
| Number of modules per controller | | | | | | | | | | | 1 ~ 6 | pcs |
| Battery module voltage range | | | | | | | | | | | 600 ~ 900 | V |
| Protection | | | | | | | | | | | | |
| Safety protection feature | | | | | | | | | | | DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection, Insulation monitoring, Residual current monitoring, DC/AC surge protection | |
| General Data | | | | | | | | | | | | |
| Dimensions (W / H / D) | | | | | | | | | | | 700 / 300 / 260 | mm |
| Weight | | | | | | | | | | | 36 | kg |
| Storage temperature range | | | | | | | | | | | -40 ~ 70 | °C |
| Operating temperature range | | | | | | | | | | | -30 ~ 60 | °C |
| Relative humidity range | | | | | | | | | | | 0% ~ 95% | |
| Max. operating altitude | | | | | | | | | | | 4000 | m |
| Cooling | | | | | | | | | | | Smart air cooling | |
| System ingress protection rating | | | | | | | | | | | IP66 | |
| Communication | | | | | | | | | | | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) | |
| Standard Compliance | | | | | | | | | | | | |
| Standard ² | | | | | | | | | | | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2 | |

- This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.
- For all standards refer to the certificates category in the Sigenenergy website.

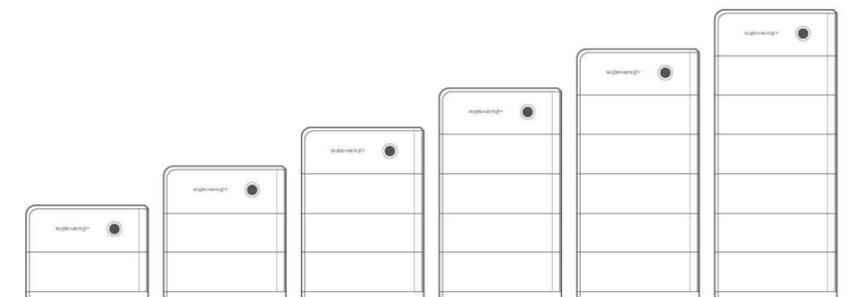


Sigen Battery

- Large cell capacity, low voltage & durable
- Multi-layer full battery safety protection
- Visible battery status on mySigen App
- Quick connectors for fast installation
- AI enablement, optimized battery cycle life
- Parallel connections for flexible battery mix

Sigen Battery 5.0 / 8.0 kWh

| SigenStor BAT | 5.0 | 8.0 | Units |
|---|---|------|-------|
| Performance Specification | | | |
| Battery type | LiFePO4 | | |
| Total energy capacity | 5.38 | 8.06 | kWh |
| Usable energy capacity ¹ | 5.2 | 7.8 | kWh |
| Battery modules voltage range (single phase system) | 300 ~ 600 | | V |
| Battery modules voltage range (three phase system) | 600 ~ 900 | | V |
| Max. charge / discharge power | 2500 | 4000 | W |
| Peak charge / discharge power (10 seconds) | 3750 | 6000 | W |
| General Data | | | |
| Weight | 55 | 70 | kg |
| Dimensions (W / H / D) | 767 / 270 / 260 | | mm |
| Storage temperature range | -25 ~ 60 | | °C |
| Operating temperature range | -20 ~ 55 | | °C |
| Relative humidity range | 5% ~ 95% | | |
| Max. operating altitude | 4000 | | m |
| Cooling | Natural convection | | |
| System ingress protection rating | IP66 | | |
| Installation method | Floor standing / Wall-mounted | | |
| Standard Compliance | | | |
| Standard | IEC/EN 60730-1, UN 38.3, IEC/EN 62619, IEC/EN 63056, IEC/EN 62040 | | |



| Number of battery modules ² | 1 | 2 | 3 | 4 | 5 | 6 | pcs |
|--|------|-------|-------|-------|------|-------|-----|
| Total energy capacity | 8.06 | 16.12 | 24.18 | 32.24 | 40.3 | 48.36 | kWh |
| Max. charge / discharge power | 4 | 8 | 12 | 16 | 20 | 24 | kW |
| Total weight | 112 | 183 | 254 | 325 | 396 | 467 | kg |
| Total height (with base) | 640 | 910 | 1180 | 1450 | 1720 | 1990 | mm |
| Total width (with decorative covers) | | | | 850 | | | mm |
| Total depth (with decorative covers) | | | | 260 | | | mm |

1. Test conditions: 100% depth of discharge, 0.2C rate charge & discharge averagely at 25°C, at the beginning of life.
 2. The data in the table is based on the combination of SigenStor BAT 8.0 and SigenStor EC three-phase as an example, with a ground-mounted installation.



Sigen EV DC Charging Module

- V2H power supply, ample backup energy
- V2G power transfer, ready for energy trading
- EV-supported home energy system black start
- Max. 25 kW stable bi-directional charging
- 150V ~ 1000V charging, wide EV compatibility
- Charge EV with 100% solar power
- Track & schedule charging on mySigen App
- IP66 system protection, maintenance free

Sigen EV DC Charging Module 12 / 25 kW

Preliminary

| SigenStor EVDC ¹ | 12 | 25 | Units |
|---|--|----|-------|
| DC Output | | | |
| Max. charging power | 12.5 | 25 | kW |
| Max. discharging power (V2H, V2G) | 12.5 | 25 | kW |
| Output voltage range | 150 ~ 1000 | | V |
| Max. output current | 40 | 80 | A |
| Charging interfaces | CCS2 | | |
| Protection | | | |
| Short-circuit protection | Supported | | |
| Over / Under voltage protection | Supported | | |
| Overload protection | Supported | | |
| Over temperature protection | Supported | | |
| Reverse polarity protection | Supported | | |
| Welded contactor check | Supported | | |
| General Data | | | |
| Dimensions (W / H / D) | 700 / 270 / 260 | | mm |
| Weight | 40 | | kg |
| Storage temperature range | -40 ~ 70 | | °C |
| Operating temperature range | -30 ~ 60 | | °C |
| Relative humidity range | 5% ~ 95% | | |
| Max. operating altitude | 4000 | | m |
| Cooling | Smart air cooling | | |
| System ingress protection rating | IP66 | | |
| Integrated charging cable length ² | 5 / 7.5 | | m |
| Function | | | |
| Authentication | RFID card / Auto. charging (no authentication) | | |
| Application | Bi-directional charging (V2H, V2G) Smart load management, Reservation | | |
| User interfaces | LED indicator, App, RFID / NFC reader | | |
| Remote function | OTA, Remote diagnosis | | |

1. Sigen EV DC Charging Module needs to be used together with Sigen Energy Controller.
 2. Integrated charging cable length refers to the length of the cable that extends from the Sigen EV DC Charging Module, not the length of the exposed cable.



SIGENERGY

Sigen Hybrid Inverter

3.0 – 6.0kW Single Phase

5.0 – 25.0kW Three Phase

- Battery ready, future proof
- DC ground-fault protection
- DC/AC ratio up to 2 (single phase)
- Up to 4 MPP. trackers (three phase)
- IP66 protection rating

Sigen Hybrid Inverter 3.0–6.0 kW Single Phase

| Sigen Hybrid | 3.0 SP | 3.6 SP | 4.0 SP | 4.6 SP | 5.0 SP | 6.0 SP | Units | |
|-------------------------------------|---|--------|--------|--------|--------|--------|---|-----|
| DC Input | | | | | | | | |
| Max. PV power | 6000 | 7360 | 8000 | 9200 | 10000 | 12000 | W | |
| Max. DC input voltage | | | | | | | 600 | V |
| Nominal DC input voltage | | | | | | | 350 | V |
| Start-up voltage | | | | | | | 100 | V |
| MPPT voltage range | | | | | | | 50 ~ 550 | V |
| Number of MPP. trackers | | | | | | | 2 | |
| Number of PV strings per MPPT | | | | | | | 1 | |
| Max. input current per MPPT | | | | | | | 16 | A |
| Max. short-circuit current per MPPT | | | | | | | 20 | A |
| AC Output (on-grid) | | | | | | | | |
| Nominal output power | 3000 | 3680 | 4000 | 4600 | 5000 | 6000 | W | |
| Max. output apparent power | 3300 | 3680 | 4400 | 5000 | 5500 | 6600 | VA | |
| Nominal output current | 13.6 | 16.0 | 18.2 | 20.9 | 22.7 | 27.3 | A | |
| Max. output current | 15.0 | 16.0 | 20.0 | 22.7 | 25.0 | 30.0 | A | |
| Nominal output voltage | | | | | | | 220 / 230 / 240 | V |
| Nominal grid frequency | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total current harmonic distortion | | | | | | | THDi < 2% | |
| Efficiency | | | | | | | | |
| Max. efficiency | | | | | | | 98.0% | |
| European efficiency | 97.0% | 97.1% | 97.2% | 97.3% | 97.4% | 97.4% | | |
| Additional Features | | | | | | | | |
| Compatible battery module | | | | | | | SigenStor BAT 5.0 / 8.0 | |
| Number of modules per controller | | | | | | | 1 ~ 6 | pcs |
| Battery module voltage range | | | | | | | 300 ~ 600 | V |
| Peak output power (10 seconds) | 4500 | 5520 | 6000 | 6900 | 7500 | 9000 | W | |
| Nominal output voltage | | | | | | | 220 / 230 / 240 | V |
| Protection | | | | | | | | |
| Safety protection feature | DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection, Insulation monitoring, Residual current monitoring, DC/AC surge protection | | | | | | | |
| General Data | | | | | | | | |
| Dimensions (W / H / D) | | | | | | | 700 / 300 / 268 | mm |
| Weight | | | | | | | 18 | kg |
| Storage temperature range | | | | | | | -40 ~ 70 | °C |
| Operating temperature range | | | | | | | -30 ~ 60 | °C |
| Relative humidity range | | | | | | | 0% ~ 95% | |
| Max. operating altitude | | | | | | | 4000 | m |
| Cooling | | | | | | | Natural convection | |
| Ingress protection rating | | | | | | | IP66 | |
| Installation method | | | | | | | Wall-mounted | |
| Communication | | | | | | | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) | |
| Standard Compliance | | | | | | | | |
| Standard ¹ | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2 | | | | | | | |

¹ For all standards refer to the certificates category in the Sigenenergy website.

Sigen Hybrid Inverter 5.0–25.0 kW Three Phase

| Sigen Hybrid | 5.0 TP | 6.0 TP | 8.0 TP | 10.0 TP | 12.0 TP | 15.0 TP | 17.0 TP | 20.0 TP | 25.0 TP | Units | |
|-------------------------------------|---|--------|--------|---------|---------|---------|---------|---------|---------|---|-----|
| DC Input | | | | | | | | | | | |
| Max. PV power | 8000 | 9600 | 12800 | 16000 | 19200 | 24000 | 27200 | 32000 | 40000 | W | |
| Max. DC input voltage | | | | | | | | | | 1100 | V |
| Nominal DC input voltage | | | | | | | | | | 600 | V |
| Start-up voltage | | | | | | | | | | 180 | V |
| MPPT voltage range | | | | | | | | | | 160 ~ 1000 | V |
| Number of MPP. trackers | 2 | | | 3 | | | 4 | | | | |
| Number of PV strings per MPPT | | | | | | | | | | 1 | |
| Max. input current per MPPT | | | | | | | | | | 16 | A |
| Max. short-circuit current per MPPT | | | | | | | | | | 20 | A |
| AC Output (on-grid) | | | | | | | | | | | |
| Nominal output power | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 | 17000 | 20000 | 25000 | W | |
| Max. output apparent power | 5500 | 6600 | 8800 | 11000 | 13200 | 16500 | 18700 | 22000 | 27500 | VA | |
| Nominal output current | 7.6 | 9.1 | 12.2 | 15.2 | 18.2 | 22.8 | 25.8 | 30.4 | 38.0 | A | |
| Max. output current | 8.4 | 10.0 | 13.4 | 16.7 | 20.1 | 25.1 | 28.4 | 33.4 | 41.8 | A | |
| Nominal output voltage | | | | | | | | | | 380 / 400 | V |
| Nominal grid frequency | | | | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total current harmonic distortion | | | | | | | | | | THDi < 2% | |
| Efficiency | | | | | | | | | | | |
| Max. efficiency | 98.1% | 98.2% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | | |
| European efficiency | 96.1% | 96.6% | 97.1% | 97.5% | 97.7% | 97.9% | 97.9% | 97.9% | 98.0% | | |
| Additional Features | | | | | | | | | | | |
| Compatible battery module | | | | | | | | | | SigenStor BAT 5.0 / 8.0 | |
| Number of modules per controller | | | | | | | | | | 1 ~ 6 | pcs |
| Battery module voltage range | | | | | | | | | | 600 ~ 900 | V |
| Peak output power (10 seconds) | 7500 | 9000 | 12000 | 15000 | 18000 | 22500 | 25500 | 30000 | 30000 | W | |
| Nominal output voltage | | | | | | | | | | 380 / 400 | V |
| Protection | | | | | | | | | | | |
| Safety protection feature | DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection, Insulation monitoring, Residual current monitoring, DC/AC surge protection | | | | | | | | | | |
| General Data | | | | | | | | | | | |
| Dimensions (W / H / D) | | | | | | | | | | 700 / 300 / 283 | mm |
| Weight | | | | | | | | | | 36 | kg |
| Storage temperature range | | | | | | | | | | -40 ~ 70 | °C |
| Operating temperature range | | | | | | | | | | -30 ~ 60 | °C |
| Relative humidity range | | | | | | | | | | 0% ~ 95% | |
| Max. operating altitude | | | | | | | | | | 4000 | m |
| Cooling | | | | | | | | | | Smart air cooling | |
| Ingress protection rating | | | | | | | | | | IP66 | |
| Installation method | | | | | | | | | | Wall-mounted | |
| Communication | | | | | | | | | | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) | |
| General Data | | | | | | | | | | | |
| Standard ¹ | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2 | | | | | | | | | | |

¹ For all standards refer to the certificates category in the Sigenenergy website.

Sigen PV Inverter

3.0 – 6.0kW Single Phase

5.0 – 25.0kW Three Phase



- Easy installation with side cabling
- Visible energy tracking on mySigen App
- WLAN, Ethernet & 4G communication
- DC/AC ratio up to 2 (single phase)
- Up to 4 MPP. trackers (three phase)
- IP66 protection rating

Sigen PV Inverter 3.0–6.0 kW Single Phase

| Sigen PV Max | 3.0 SP | 3.6 SP | 4.0 SP | 4.6 SP | 5.0 SP | 6.0 SP | Units | |
|-------------------------------------|---|--------|--------|--------|--------|--------|---|----|
| DC Input | | | | | | | | |
| Max. PV power | 6000 | 7360 | 8000 | 9200 | 10000 | 12000 | W | |
| Max. DC input voltage | | | | | | | 600 | V |
| Nominal DC input voltage | | | | | | | 350 | V |
| Start-up voltage | | | | | | | 100 | V |
| MPPT voltage range | | | | | | | 50 ~ 550 | V |
| Number of MPP. trackers | | | | | | | 2 | |
| Number of PV strings per MPPT | | | | | | | 1 | |
| Max. input current per MPPT | | | | | | | 16 | A |
| Max. short-circuit current per MPPT | | | | | | | 20 | A |
| AC Output | | | | | | | | |
| Nominal output power | 3000 | 3680 | 4000 | 4600 | 5000 | 6000 | W | |
| Max. output apparent power | 3300 | 3680 | 4400 | 5000 | 5500 | 6600 | VA | |
| Nominal output current | 13.6 | 16.0 | 18.2 | 20.9 | 22.7 | 27.3 | A | |
| Max. output current | 15.0 | 16.0 | 20.0 | 22.7 | 25.0 | 30.0 | A | |
| Nominal output voltage | | | | | | | 220 / 230 / 240 | V |
| Nominal grid frequency | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total current harmonic distortion | | | | | | | THDi < 2% | |
| Efficiency | | | | | | | | |
| Max. efficiency | | | | | | | 98.0% | |
| European efficiency | 97.0% | 97.1% | 97.2% | 97.3% | 97.4% | 97.4% | | |
| Protection | | | | | | | | |
| Safety protection feature | DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection, Insulation monitoring, Residual current monitoring, DC/AC surge protection | | | | | | | |
| General Data | | | | | | | | |
| Dimensions (W / H / D) | | | | | | | 700 / 300 / 268 | mm |
| Weight | | | | | | | 18 | kg |
| Storage temperature range | | | | | | | -40 ~ 70 | °C |
| Operating temperature range | | | | | | | -30 ~ 60 | °C |
| Relative humidity range | | | | | | | 0% ~ 95% | |
| Max. operating altitude | | | | | | | 4000 | m |
| Cooling | | | | | | | Natural convection | |
| Ingress protection rating | | | | | | | IP66 | |
| Installation method | | | | | | | Wall-mounted | |
| Communication | | | | | | | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) | |
| Standard Compliance | | | | | | | | |
| Standard ¹ | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 62477, IEC/EN 61000-6-1, IEC/EN 61000-6-2 | | | | | | | |

¹ For all standards refer to the certificates category in the Sigenenergy website.

Sigen PV Inverter 5.0–25.0 kW Three Phase

| Sigen PV Max | 5.0 TP | 6.0 TP | 8.0 TP | 10.0 TP | 12.0 TP | 15.0 TP | 17.0 TP | 20.0 TP | 25.0 TP | Units | | |
|-------------------------------------|---|--------|--------|---------|---------|---------|---------|---------|---------|-------|---|----|
| DC Input | | | | | | | | | | | | |
| Max. PV power | 8000 | 9600 | 12800 | 16000 | 19200 | 24000 | 27200 | 32000 | 40000 | W | | |
| Max. DC input voltage | | | | | | | | | | | 1100 | V |
| Nominal DC input voltage | | | | | | | | | | | 600 | V |
| Start-up voltage | | | | | | | | | | | 180 | V |
| MPPT voltage range | | | | | | | | | | | 160 ~ 1000 | V |
| Number of MPP. trackers | 2 | | 3 | | | 4 | | | | | | |
| Number of PV strings per MPPT | | | | | | | | | | | 1 | |
| Max. input current per MPPT | | | | | | | | | | | 16 | A |
| Max. short-circuit current per MPPT | | | | | | | | | | | 20 | A |
| AC Output | | | | | | | | | | | | |
| Nominal output power | 5000 | 6000 | 8000 | 10000 | 12000 | 15000 | 17000 | 20000 | 25000 | W | | |
| Max. output apparent power | 5500 | 6600 | 8800 | 11000 | 13200 | 16500 | 18700 | 22000 | 27500 | VA | | |
| Nominal output current | 7.6 | 9.1 | 12.2 | 15.2 | 18.2 | 22.8 | 25.8 | 30.4 | 38.0 | A | | |
| Max. output current | 8.4 | 10.0 | 13.4 | 16.7 | 20.1 | 25.1 | 28.4 | 33.4 | 41.8 | A | | |
| Nominal output voltage | | | | | | | | | | | 380 / 400 | V |
| Nominal grid frequency | | | | | | | | | | | 50 / 60 | Hz |
| Power factor | | | | | | | | | | | 0.8 leading ~ 0.8 lagging | |
| Total current harmonic distortion | | | | | | | | | | | THDi < 2% | |
| Efficiency | | | | | | | | | | | | |
| Max. efficiency | 98.1% | 98.2% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | 98.3% | | | |
| European efficiency | 96.1% | 96.6% | 97.1% | 97.5% | 97.7% | 97.9% | 97.9% | 97.9% | 98.0% | | | |
| Protection | | | | | | | | | | | | |
| Safety protection feature | DC ground fault protection, Arc fault circuit interrupter, DC reverse polarity protection, Anti-islanding protection, AC overcurrent/overvoltage/short-circuit protection, Insulation monitoring, Residual current monitoring, DC/AC surge protection | | | | | | | | | | | |
| General Data | | | | | | | | | | | | |
| Dimensions (W / H / D) | | | | | | | | | | | 700 / 300 / 283 | mm |
| Weight | | | | | | | | | | | 36 | kg |
| Storage temperature range | | | | | | | | | | | -40 ~ 70 | °C |
| Operating temperature range | | | | | | | | | | | -30 ~ 60 | °C |
| Relative humidity range | | | | | | | | | | | 0% ~ 95% | |
| Max. operating altitude | | | | | | | | | | | 4000 | m |
| Cooling | | | | | | | | | | | Smart air cooling | |
| Ingress protection rating | | | | | | | | | | | IP66 | |
| Installation method | | | | | | | | | | | Wall-mounted | |
| Communication | | | | | | | | | | | WLAN / Fast Ethernet / RS485 / Sigen CommMod (4G/3G/2G) | |
| Standard Compliance | | | | | | | | | | | | |
| Standard ¹ | IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-2 | | | | | | | | | | | |

¹ For all standards refer to the certificates category in the Sigenenergy website.

Sigen Energy Gateway

- Multiple breaker positions reserved for SigenStor or other loads
- Seamless switch to backup mode, worry-free energy usage
- Ready for generator, heat pump or other controllable loads
- Support both whole home backup & partial home backup
- 350 ms reverse power flow protection of grid & generator
- Uninterrupted power supply through PV+ESS/grid/generator



Sigen Energy Gateway HomeMax Single / Three Phase

Preliminary

| Sigen Gateway | HomeMax SP | HomeMax TP | Units |
|---|---|-----------------|-------|
| Grid Connection | | | |
| Grid connection type | Single phase | Three phase | |
| Nominal AC input / output voltage | 220 / 230 / 240 | 380 / 400 | V |
| Nominal AC input / output current | 100 | 76 | A |
| Nominal AC input / output power | 22 / 23 / 24 | 50 / 52.6 | kW |
| Nominal AC frequency | | 50 / 60 | Hz |
| Disruption time of backup switch ¹ | | 0 | ms |
| AC Output to Backup Port | | | |
| Nominal AC output voltage | 220 / 230 / 240 | 380 / 400 | V |
| Nominal AC output current | 100 | 76 | A |
| Nominal AC output power | 22 / 23 / 24 | 50 / 52.6 | kW |
| Nominal AC frequency | | 50 / 60 | Hz |
| Overvoltage category | | III | |
| Inverter Connection / EV Charger Port (optional) | | | |
| Max. number of connection | 3 | 2 | |
| Nominal AC voltage | 220 / 230 / 240 | 380 / 400 | V |
| Nominal AC input current | 32 | 38 | A |
| Compatible EV charger power | 7 | 11 / 22 | kW |
| EV charging mode | Solar boost charging, time-based charging, load balancing | | |
| Smart Port Connection | | | |
| Generator output voltage | 220 / 230 / 240 | 380 / 400 | |
| Nominal input / output current | 63 | 76 | A |
| Nominal AC input / output power | 13.8 / 14.5 / 15.1 | 50 / 52.6 | kW |
| Generator 2-wire start | Supported | | |
| General Data | | | |
| Dimensions (W / H / D) | 455 / 660 / 179 | 510 / 750 / 179 | mm |
| Weight | 19 | 23 | kg |
| Storage temperature range | -40 ~ 70 | | °C |
| Operating temperature range | -30 ~ 55 | | °C |
| Relative humidity range | 0% ~ 95% | | |
| Max. operation altitude | 4000 | | m |
| Cooling | Natural convection | | |
| Ingress protection rating | IP54 | | |
| Communication | Fast Ethernet, RS485, dry contact | | |
| Installation method | Wall mounted | | |

1. This refers to the load-side disruption time, to achieve this functionality Sigen Energy Gateway needs to be used together with Sigen Energy Controller and Sigen Battery. Test conditions: In the open-circuit state of the power grid, the nominal power of the Sigen Energy Controller is higher than the total power of the home loads.



Sigen Communication Module

- IP66 protection rating, more reliable
- Plug & play, easy to use
- Support 2G / 3G / 4G communication

Sigen Communication Module

| | Sigen CommMod | Units |
|-------------------------------------|--|-------|
| Connection interface | USB | |
| Installation type | Plug-and-play | |
| Display | LED indicators | |
| Dimensions (W / H / D) | 52 / 112 / 33 | mm |
| Weight | 90 | g |
| Ingress protection rating | IP66 | |
| Power consumption (typical) | < 4 | W |
| Supported standards | 4G: FDD-LTE / TDD-LTE 3G: WCDMA / HSDPA / HSUPA / HSPA+ 2G: GSM / GPRS / EDGE3 | |
| Storage temperature range | -40 ~ 70 | °C |
| Operating temperature range | -30 ~ 60 | °C |
| Relative humidity range | 0% ~ 95% | |
| Max. operating altitude | 4000 | m |
| Controller / Inverter compatibility | Sigen Energy Controller series Sigen Hybrid Inverter series Sigen PV Inverter series | |





Sigen Power Sensor

- 1% high-accuracy power detection for precise control
- LCD real-time info display, easy to operate and check
- Integrates smoothly with Sigenergy devices, no need for setup
- Top class 100 A direct connection in power sensor with built-in CT
- Support export/import limitations and ready for AI evolving
- 100 ms data refresh rate, instantaneous data feed

Sigen Power Sensor

| Sigen Sensor ¹ | SP-DH | SP-CT120-DH | TP-DH | TP-CT120-DH | Units |
|------------------------------|--------------------------------------|---------------|---------------|----------------|-------|
| Power Supply | | | | | |
| Grid connection type | 1P2W | | 3P3W/3P4W | | |
| AC input voltage range | 176 ~ 276 | | 173 ~ 480 | | Vac |
| Nominal AC frequency | 50 / 60 | | | | Hz |
| Max. operating current | 100 | - | 100 | - | A |
| Measurement Accuracy | | | | | |
| Voltage accuracy | 0.5% | | | | |
| Current accuracy | 0.5% | | | | |
| Power accuracy | 1% | | | | |
| Frequency accuracy | 0.2% | | | | |
| Communication | | | | | |
| Interface | RS485 | | | | |
| Baud rate | 9600 | | | | bps |
| Protocol | Modbus RTU | | | | |
| General Data | | | | | |
| Dimensions (W / H / D) | 36 / 100 / 63 | 18 / 118 / 64 | 72 / 100 / 66 | 72 / 94.5 / 65 | mm |
| Weight | 0.20 | 0.07 | 0.32 | 0.20 | kg |
| Storage temperature range | -40 ~ 85 | | | | °C |
| Operating temperature range | -30 ~ 60 | | | | °C |
| Relative humidity range | 0% ~ 90% | | | | |
| Ingress protection rating | IP51 | | | | |
| Installation method | DIN Rail 35 mm | | | | |
| CT Accessory | | | | | |
| Number of CT | - | 1 | - | 3 | pcs |
| Cable length of CT | - | 1 | - | 1 | m |
| Inner diameter of CT | - | 16 | - | 16 | mm |
| Weight of CT | - | 0.09 | - | 0.09 | kg |
| Max. operating current of CT | - | 120 | - | 120 | A |
| Standard Compliance | | | | | |
| Standard | EN 61010-1:2010, EN 61010-2-030:2010 | | | | |

1. For more models refer to the Sigenergy website.

Sigen EV AC Charger



- Green power charging with Sigenenergy home energy solution
- Data tracking & scheduled charging on mySigen App
- Dynamic load management to prevent overload, user-friendly charging*
- Easy installation with less steps and top/bottom entry option
- Integrated residual current failure protection reduces installation costs
- IP65 and wall/pole-mounted installation provide high adaptability

* Only works with Sigenenergy home energy solution or additional Sigen Power Sensor

Sigen EV AC Charger 7 / 11 / 22 kW

| Sigen EVAC | 7 | 11 | 22 | Units |
|--|--|-----------------------------------|-----------------------------------|-----------------|
| AC Input & Output | | | | |
| Nominal charging power | 7 | 11 | 22 | kW |
| Nominal output voltage | 1P/N/PE, 220 ~ 240 | 3P/N/PE, 220 ~ 240 / 380 ~ 415 | 3P/N/PE, 220 ~ 240 / 380 ~ 415 | V |
| Output current range | 6 ~ 32 | 6 ~ 16 | 6 ~ 32 | A |
| Nominal AC frequency | | 50 / 60 | | Hz |
| Vehicle connection | Type 1 connector / Type 2 connector / Type 2 socket with shutters | | | |
| AC input cable width range | 2.5 ~ 6.0 | | | mm ² |
| Protection | | | | |
| Integrated DC fault detection ¹ | 6 | | | mA |
| Integrated AC fault detection ¹ | 30 | | | mA |
| Flame retardant rating | UL94-5VB | | | |
| Over / Under voltage protection | Supported | | | |
| Overload protection | Supported | | | |
| Over temperature protection | Supported | | | |
| PEN protection | Supported | | | |
| TIC electricity linky meter interface | Supported | | | |
| Randomized charging delay | Supported | | | |
| Ground fault protection | Supported | | | |
| Surge protection | Supported | | | |
| Grounding system | TT, TN, IT | | | |
| User Interface & Communication | | | | |
| Protocol | Modbus TCP | | | |
| Communication | 4G / WLAN / Fast Ethernet | | | |
| Authentication | RFID card / App / Auto-charge (no authentication) | | | |
| Display | LED indicator / App | | | |
| Charging mode | Standard charging / Scheduled charging / Solar boost charging | | | |
| Metering | External meter with RS485 / Integrated metering IC | | | |
| Dynamic load management | Supported | | | |
| Phase switching | Supported | | | |
| General Data | | | | |
| Dimensions (W / H / D) | 234 / 384 / 126 | | | mm |
| Weight (case B / case C) | 4.5 / 6.4 | | | kg |
| Storage temperature range | -40 ~ 70 | | | °C |
| Operating temperature range | -30 ~ 55 | | | °C |
| Relative humidity range | 5% ~ 95% | | | |
| Max. operating altitude | 4000 | | | m |
| Cooling | Natural convection | | | |
| Ingress protection rating | IP65 | | | |
| Installation method | Wall-mounted | | | |
| Application environment | Outdoor / Indoor | | | |
| Standby self-consumption | < 3.6 | | | W |
| Standard charging cable length | 5 | | | m |
| Standard Compliance | | | | |
| Standard ² | EN IEC 61851-1, IEC 62995, EN IEC 61851-21-2, ETSI EN 300 330 V2.1.1, ETSI EN 301 511 V12.5.1, EN IEC 62311, EN50665, ETSI EN 300 328 V2.2.2 | | | |

1. Residual direct current protective device (RDC-PD) with integrated AC pulsating DC and 6mA DC detection, evaluation and mechanical switching in the Sigen EV AC Charger is tested according to IEC 62955.
2. For all standards refer to the certificates category in the Sigenenergy website.

mySigen App

Intelligent energy management within touches
For homeowners

Smarter energy life empowered by mySigen App



Real-time monitoring

Energy data refresh every 10 seconds
Visible energy flow & related devices
Auto. system network display on App



AI Mode

Provide intelligent optimization suggestions on system mode, battery capacity and energy usage



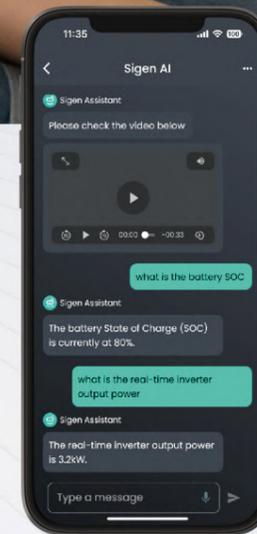
Sigen Shield

Discover industry-leading battery safety features



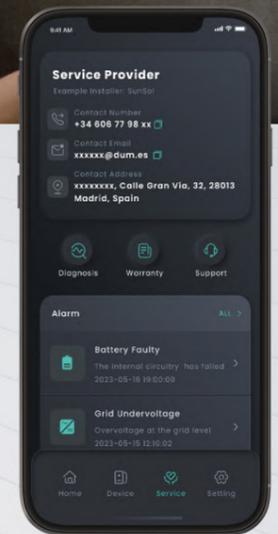
Fun ambient lighting

Customizable lighting language
Add personality to your system



Sigen AI

After-sales engineer
Home energy analyst
Device mgmt. assistant



Interactive services

AI-integrated service interface
Self-diagnosis to identify problems
Submit service requests via the App

mySigen App

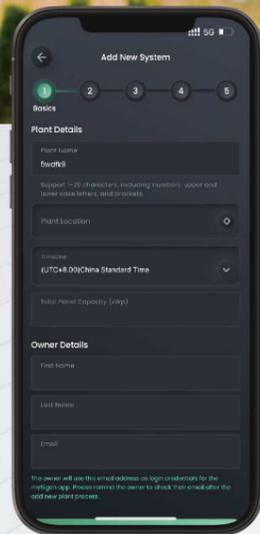
Intelligent energy management within touches
For installers

Simplify your installation process, one App does it all



Step 1

Scan to add a new system



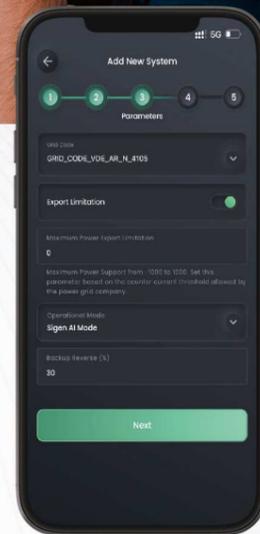
Step 2

Fill out details



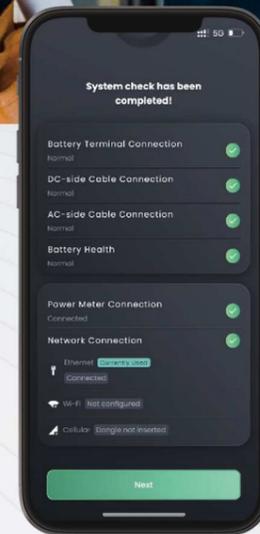
Step 3

Fast software upgrade



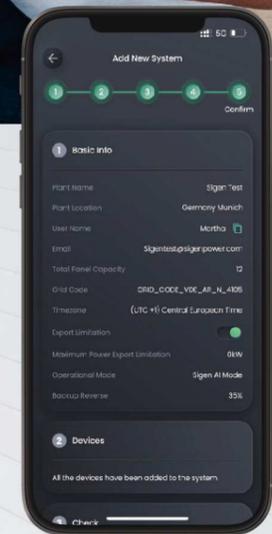
Step 4

Confirm preset parameters



Step 5

One-click full system check



Step 6

Confirm

Leading the Way in Intelligent Manufacturing



6 GWh

Battery production capacity

12 GW

Inverter production capacity

Located in the Lin-gang New Area, Shanghai, a hub of world-class enterprises with strong innovative strengths, the 20,000 sqm manufacturing center is equipped with state-of-the-art technology and innovative manufacturing processes that allow us to produce high-quality products with exceptional efficiency. It also features the latest manufacturing execution system (MES) which streamlines our operations and enables real-time monitoring of the production process.



Runs on Solar by Sigenergy solutions for a Sustainable Tomorrow

By adopting Sigenergy products and embracing solar energy, our factory has realized green manufacturing. With a 3,000 sqm PV plant on the rooftop, We have significantly reduced our reliance on fossil fuels and effectively cut carbon footprint during the manufacturing process. Our solar-powered production also translates into better efficiency and higher cost savings for our business. We are proud to be making a positive impact on the environment, and are committed to continuing to lead our sustainability practices to help build a better world for future generations.

Plant Size

 3,000 m²  362 kW_p  240 kW_{ac}  432 kWh

Estimated Annual Generation

 398,200 kWh

Community Contribution per Year

 309t CO₂ emission reduced

 269 equivalent of trees planted



Manufacturing Execution System (MES)

Quality and efficiency is consistently guaranteed by our MES system, which monitors, tracks, documents, and controls the entire manufacturing process from raw materials to finished products, as well as full product lifecycle management.

Where Quality Meets Perfection

At Sigenergy, our unwavering commitment to putting the customer first is at the core of everything we do. We firmly believe that delivering top-quality products is paramount to ensuring customer satisfaction and building long-term relationships. With a relentless pursuit of excellence, we constantly strive to develop innovative products that meet and exceed customer expectations. Our strict implementation of rigorous quality control guarantees that every product leaving our factories is of the highest standard. Moreover, we never settle for complacency; Instead, we embrace a culture of continuous improvement to constantly enhance our products and surpass industry standards.



Join Us Achieve Together

As service partners, you can enjoy



More Credibility

As an official service partner, you may get more access to financial support, as well as helping your customers qualify for government rebates.

Training & Certification

We offer continuous technical training to prepare you and uplift your skills. You can earn more customer trust by getting certified.

Recognition & Rewards

The higher customer satisfaction rating you get, the more prizes and financial rewards you'll receive.

Operations Care

Whatever you need, your business gets priority support from us. Large premium partners also receive spare parts without up-front payment.

Simplified Process

Whether for installation or service, our one-stop mobile App will assist you all the way to ensure a quick and smooth experience.

Exclusive Promotion

As a certified service partner, your business potential is maximized by our priority recommendation to your local customers.