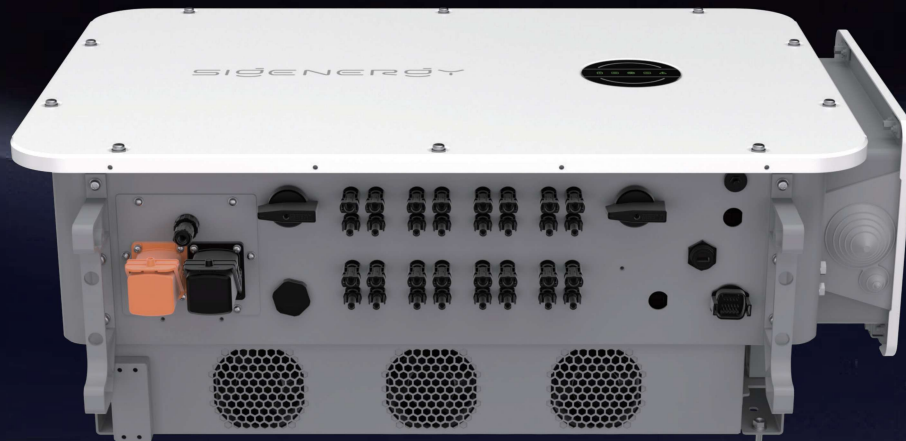


Sigen Hybrid Inverter

50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW



- Battery ready, easy upgrades to a PV + BESS at any time
- Smaller and lighter, easier installation and transportation
- Built-in EMS, supports 100 units in parallel without data logger
- Industry-leading 500m AFCI, top-tier safety across applications
- On-site self-power supply, removes the need for temporary power
- IP66 protection rating, ensuring worry-free outdoor deployment

Signen Hybrid Inverter 50.0 / 60.0 / 80.0 / 100.0 / 110.0 / 125.0 kW

| Signen PV | 50MI-HYA | 60MI-HYA | 80MI-HYA | 100MI-HYA | 110MI-HYA | 125MI-HYA | Units |
|--|---|-----------|-----------|-----------------|-----------|-----------|-------|
| DC Input (PV) | | | | | | | |
| Max. PV input power | 100,000 | 120,000 | 160,000 | 200,000 | 220,000 | 220,000 | Wp |
| Max. DC input voltage | 1,100 | | | | | | V |
| Nominal DC input voltage | 600 @380/400 Vac, 720 @480 Vac | | | | | | V |
| Start-up voltage | 180 | | | | | | V |
| MPPT voltage range | 160 ~ 1,000 | | | | | | V |
| Number of MPP. trackers | 4 | 5 | 6 | 8 | 8 | 8 | |
| Number of PV strings per MPPT | 2 | | | | | | |
| Max. input current per MPPT | 40 | | | | | | A |
| Max. short-circuit current per MPPT | 60 | | | | | | A |
| DC Input (Battery) | | | | | | | |
| Battery module models | SignenStack BAT 12.0 | | | | | | |
| System configuration quantity range ¹ | 4 ~ 21 | | | | | | pcs |
| Max. charge power | 55,000 | 66,000 | 88,000 | 110,000 | 121,000 | 137,500 | W |
| Max. discharge power | 55,000 | 66,000 | 88,000 | 110,000 | 121,000 | 137,500 | W |
| Max. operating current | 180 | | | | | | A |
| AC Output | | | | | | | |
| Nominal output active power | 50,000 | 60,000 | 80,000 | 100,000 | 110,000 | 125,000 | W |
| Max. output apparent power | 55,000 | 66,000 | 88,000 | 110,000 | 121,000 | 137,500 | VA |
| Max. output active power (cosΦ=1) | 55,000 | 66,000 | 88,000 | 110,000 | 121,000 | 137,500 | W |
| Nominal output current @380Vac | 76.0 | 91.2 | 121.5 | 151.9 | 167.1 | 189.9 | A |
| Nominal output current @400Vac | 72.5 | 87.0 | 115.9 | 144.9 | 159.4 | 181.2 | A |
| Nominal output current @480Vac | 60.2 | 72.2 | 96.3 | 120.3 | 132.4 | 150.4 | A |
| Max. output current @380 / 400Vac | 83.6 | 100.3 | 133.7 | 167.1 | 183.8 | 208.9 | A |
| Max. output current @480Vac | 66.2 | 79.4 | 105.9 | 132.4 | 145.6 | 165.5 | A |
| Nominal output voltage | 380 / 400 / 480, 3W+(N)+PE | | | | | | Vac |
| Nominal grid frequency | 50 / 60 | | | | | | Hz |
| Power factor | 0.8 leading ~ 0.8 lagging | | | | | | |
| Total current harmonic distortion | THDi < 3% | THDi < 3% | THDi < 2% | THDi < 2% | THDi < 2% | THDi < 2% | |
| Efficiency | | | | | | | |
| Max. efficiency @380/400 Vac | 98.6% | | | | | | |
| European efficiency @380/400 Vac | 98.3% | 98.3% | 98.3% | 98.4% | 98.4% | 98.3% | |
| Max. efficiency @480 Vac | 98.8% | | | | | | |
| European efficiency @480 Vac | 98.4% | 98.4% | 98.4% | 98.6% | 98.6% | 98.4% | |
| Protection | | | | | | | |
| Safety protection feature | DC reverse polarity protection, Insulation monitoring, Residual current monitoring, Arc fault circuit interrupter, AC overcurrent/overvoltage/short-circuit protection, Type II DC/AC surge protection, Anti-islanding protection | | | | | | |
| General Data | | | | | | | |
| Dimensions (W / H / D) | 918 / 640 / 340 | | | 999 / 668 / 348 | | | mm |
| Weight | 78 | | | 95 | | | kg |
| Nighttime power consumption | < 3.5 | | | < 4 | | | W |
| Storage temperature range | -40 ~ 70 | | | | | | °C |
| Operating temperature range | -30 ~ 60 | | | | | | °C |
| Relative humidity range | 0% ~ 100% | | | | | | |
| Max. operating altitude | 5,000 (Derating at 4,000m) | | | | | | m |
| PV connection type | MC4 (Max. 6 mm ²) | | | | | | |
| AC connection type | OT / DT terminal (Max. 240 mm ²) | | | | | | |
| Cooling | Smart air cooling | | | | | | |
| Ingress protection rating | IP66 | | | | | | |
| Communication | WLAN / Fast Ethernet / RS485 / Signen 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 | | | | | | |

- The requirements for the PV string open-circuit voltage in a PV+ESS DC coupling system are as follows: 1) When the system is configured with ≥19 battery modules, the string open-circuit voltage should meet the following minimum requirements: 1.1) If configured with 21 battery modules, the string open-circuit voltage should be > 935 V; 1.2) If configured with 20 battery modules, the string open-circuit voltage should be > 870 V; 1.3) If configured with 19 battery modules, the string open-circuit voltage should be > 805 V. 2) When the system is configured with 4 to 18 battery modules, the string open-circuit voltage has no special requirements.
- For all standards refer to the certificates category on the Signenergy website.
- The information in this document reflects the current state of technology and is subject to change without notice. For the latest updates, please refer to the Signenergy website.

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