

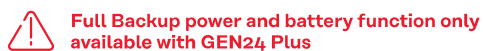
Technical data

6.0/8.0/10.0 kW

| | | | Symo GEN24/GEN24 Plus | | | | | | | |
|--------------------------|---|-------|-----------------------|-------|------------|-------|------------|-------|-------|--------|
| | | | 6.0 | | 8.0 | | 10.0 | | | |
| Input data | Number of MPP trackers | | 2 | | 2 | | 2 | | | |
| | DC input voltage range (U _{dc min} - U _{dc max}) | V | 80 - 1,000 | | 80 - 1,000 | | 80 - 1,000 | | | |
| | Rated input voltage (U _{dc,r}) | V | 610 | | 610 | | 610 | | | |
| | Feed-in start-up input voltage (U _{dc start}) | V | 80 | | 80 | | 80 | | | |
| | Usable MPP voltage range | V | 80 - 800 | | 80 - 800 | | 80 - 800 | | | |
| | MPP voltage range (at rated power) (U _{mpp min} - U _{mpp max}) | V | 174 - 800 | | 224 - 800 | | 278 - 800 | | | |
| | | | MPPT1 | MPPT2 | MPPT1 | MPPT2 | MPPT1 | MPPT2 | | |
| | Max. usable input current (I _{dc max}) | A | 25 | 12.5 | 25 | 12.5 | 25 | 12.5 | | |
| | Max. array short circuit current (I _{sc pv}) ¹ | A | 40 | 20 | 40 | 20 | 40 | 20 | | |
| | Number of DC connections | | 2 | 1 | 2 | 1 | 2 | 1 | | |
| | | MPPT1 | MPPT2 | Total | MPPT1 | MPPT2 | Total | MPPT1 | MPPT2 | Total |
| Max. usable DC power | W | 6,220 | 6,000 | 6,220 | 7,200 | 6,000 | 8,260 | 7,200 | 6,000 | 10,300 |
| Max. PV generator output | W _{peak} | 7,200 | 6,500 | 9,000 | 7,200 | 7,000 | 12,000 | 7,200 | 7,200 | 14,400 |

| | | | | | | | | |
|-------------|--|----|--|---------|---------|---------|---------|---------|
| Output data | AC rated power (P _{ac,r}) | W | 6,000 | | 8,000 | | 9,999 | |
| | Apparent power | VA | 6,000 | | 8,000 | | 9,999 | |
| | Max. output power | VA | 6,000 | | 8,000 | | 9,999 | |
| | | | 380 Vac | 400 Vac | 380 Vac | 400 Vac | 380 Vac | 400 Vac |
| | Rated AC output current | A | 9.1 | 8.7 | 12.1 | 11.6 | 15.2 | 14.5 |
| | Grid connection (U _{ac,r}) | V | 3~ NPE 400/230 or 3~ NPE 380/220 (+20%/-30%) | | | | | |
| | Frequency (frequency range f _{min} - f _{max}) | Hz | 50/60 (45 - 65) | | | | | |
| | Total harmonic distortion | % | < 3 | | < 3 | | < 3 | |
| | Power factor (cos φ _{ac,r}) | | 0.7 - 1 ind. / cap. | | | | | |

| | | | | | | | | |
|----------------------|---------------------------------------|------|----------------|--|-------|--|-------|--|
| Output data PV Point | Rated output power PV Point (Comfort) | VA | 3,000 | | 3,000 | | 3,000 | |
| | Grid connection PV Point (Comfort) | V | 1~ NPE 220/230 | | | | | |
| | Switching time | sec. | ~15 | | ~15 | | ~15 | |



Full Backup power and battery function only available with GEN24 Plus

| | | | Symo GEN24 Plus | | | | | |
|--------------------------------------|---------------------------------|------|----------------------------------|--|-------|--|-------|--|
| | | | 6.0 | | 8.0 | | 10.0 | |
| Output data Full Backup ² | Rated output power Full Backup | VA | 6,000 | | 8,000 | | 9,999 | |
| | Nominal Full Backup phase power | VA | 3,680 | | 3,680 | | 3,680 | |
| | Grid connection Full Backup | V | 3~ NPE 400/230 or 3~ NPE 380/220 | | | | | |
| | Switching time | sec. | ~10 | | ~10 | | ~10 | |

| | | | | | | | | |
|--------------------|---|---|---|--|-----------|--|-----------|--|
| Battery connection | Number of DC inputs | | 1 | | 1 | | 1 | |
| | Max. input current (I _{dc max}) | A | 22 | | 22 | | 22 | |
| | DC input voltage range (U _{dc min} - U _{dc max}) | V | 160 - 700 | | 160 - 700 | | 160 - 700 | |
| | DC battery connection technology | | 1x BATT+ and 1x BATT- push-in spring terminals 2.5 - 10 mm ² | | | | | |
| | Max. DC input/output power ³ | W | 6,220 | | 8,260 | | 10,300 | |
| | Max. charging power for AC coupling ³ | W | 6,000 | | 8,000 | | 9,999 | |
| | Compatible batteries ⁴ | | BYD Battery-Box Premium HVS/HVM & LG FLEX ⁵ | | | | | |

¹ I_{sc pv} = I_{sc max} >= I_{sc (STC)} x 1,25 according to e.g. IEC 60364-7-712, NEC 2020, AS/NZS 5033:2021.

² The Full Backup option is available for the Symo GEN24 6.0–10.0 Plus. Additional external components for grid switchover are required for the Full Backup. See the Operating Instructions for further details.

³ Depending on connected battery

⁴ Depending on the country-specific certification and availability

⁵ Excluding BYD Battery-Box Premium HVM 8.3

| | | | Symo GEN24/GEN24 Plus | | |
|---------------------------|---|--|--|------------|------------|
| | | | 6.0 | 8.0 | 10.0 |
| General data | Dimensions (height × width × depth) | mm | 595 × 529 × 180 | | |
| | Weight (inverter/with packaging) | kg | 23.4/28.5 | 23.4/28.5 | 23.4/28.5 |
| | Protection class | | IP 66 | IP 66 | IP 66 |
| | Safety class | | 1 | 1 | 1 |
| | Night consumption | W | <10 | <10 | <10 |
| | Overvoltage category (DC/AC) ⁶ | | 2/3 | 2/3 | 2/3 |
| | Cooling | | Active Cooling technology | | |
| | Installation | | Indoor and outdoor installation | | |
| | Ambient temperature range | °C | -25 to +60 | -25 to +60 | -25 to +60 |
| | Permissible humidity | % | 0 - 100 | 0 - 100 | 0 - 100 |
| | Noise emissions | dB (A) | < 47 | < 47 | < 47 |
| | Max. altitude above sea level | m | 3,000/4,000 (unrestricted/restricted voltage range) | | |
| | DC connection technology PV | | 3 × DC+ and 3 × DC- push-in spring terminals 2.5 - 10 mm ² | | |
| | AC connection technology | | 5-pin AC push-in spring terminals 1.5 - 10 mm ² 3-pin backup power push-in spring terminals 1,5 - 10 mm ² 5 × PPE screw terminals 2,5 - 16 mm ² | | |
| | Certificates and compliance with standards ⁷ | | IEC 62109, IEC 62116, IEC 61727, IEC 62909, VDE 0126, VDE AR-N4105, AS/NZS 4777.2, EN 50549, CEI 0-21, G98/G99, R25 | | |
| | Backup power functions ⁸ | | PV Point (Comfort) or Full Backup | | |
| Country of manufacture | | Austria | | | |
| Life cycle analysis | | In accordance with ÖNORM EN ISO 14040 and 14044 (checked by employees from Fraunhofer IZM) | | | |
| Efficiency | Max. efficiency | % | 98.2 | 98.2 | 98.2 |
| | Euro. efficiency (η _{EU}) | % | 97.7 | 97.8 | 97.9 |
| | MPP adaptation efficiency | % | > 99.9 | > 99.9 | > 99.9 |
| Protection devices | DC isolation measurement | | Integrated | | |
| | DC disconnecter | | Integrated | | |
| | Reverse polarity protection | | Integrated | | |
| Interfaces | WLAN/2 × Ethernet LAN | | Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON) | | |
| | 6 digital inputs 6 digital inputs/outputs | | Connection to ripple control receiver, energy management | | |
| | Emergency shut-off (WSD) | | Integrated | | |
| | Datalogger and web server | | Integrated | | |
| | 2 × RS485 | | Modbus RTU SunSpec (third-party provider)/Fronius Smart Meter, battery (GEN24 Plus), Fronius Ohmpilot | | |

⁶ In line with IEC 62109-1. Option to retrofit surge protection device DC SPD type 1+2 for 2 MPP trackers available under the following item number: 4,240,313,CK

⁷ You can find the current certificates under www.fronius.com/symo-gen24-plus-cert

⁸ Full Backup power ist only available with GEN24 Plus.