

# Fronius Symo GEN24 3.0 Plus

Product code: F.Fronius.3F.H.wifi.00030-gen24



Manufacturer	<b>FRONIUS</b>
Inverter type	<b>Hybrid</b>
Inverter phases	<b>3</b>
Max. AC power	<b>3000</b>
Output power	<b>3000</b>
Circuit breaker value	<b>16</b>
MPPT	<b>2</b>
Amperage	<b>12.5</b>
WIFI	<b>Tak</b>
Ethernet	<b>No</b>
Compatible energy storage	<b>Pylontech, BYD</b>
Compatible optimizers	<b>Tigo</b>
Warranty	<b>10</b>
CN code number	<b>85044085</b>
Quantity per pallet	<b>14</b>
Country of origin	<b>Austria</b>
Weight	<b>15.6</b>
Width	<b>47</b>
Height	<b>53</b>
Depth	<b>17</b>

The Fronius Symo GEN24 3.0 Plus hybrid inverter in the three-phase version is the perfect heart for individual PV installations. With the PV Point feature, the Fronius GEN24 Plus offers built-in basic emergency power supply and the possibility of full backup power supply on a larger scale by connecting a battery. When a battery is connected, the Fronius GEN24 Plus hybrid inverter enables achieving energy self-sufficiency in terms of electricity, heating, cooling, and e-mobility.

## Product variants

Index	Price
<b>Fronius Symo GEN24 3.0 Plus</b> F.Fronius.3F.H.wifi.00030-gen24	Product prices only visible after login. If you do not have an account, please register.

## Product description

The Fronius Symo GEN24 3.0 Plus hybrid inverter in the three-phase version is the perfect heart for individual PV installations. With the PV Point feature, the Fronius GEN24 Plus offers built-in basic emergency power supply and the possibility of full backup power supply on a larger scale by connecting a battery.

When a battery is connected, the Fronius GEN24 Plus hybrid inverter enables achieving energy self-sufficiency in terms of electricity, heating, cooling, and e-mobility.

Key features of the Fronius Symo GEN24 3.0 Plus inverter:

**INTEGRATED DATA COMMUNICATION** - The inverter offers a comprehensive data communication package, enabling full integration with Datalogging, WLAN, Ethernet, energy management, and network server. The inverter can be connected to the Internet via a network cable or wirelessly through the WLAN interface, ensuring effective monitoring of the PV installation. Additionally, interfaces such as Modbus TCP, Modbus RTU SunSpec, or Fronius Solar API (JSON) allow easy connection of components from other manufacturers. Furthermore, using the Fronius Solar.web online portal, open interfaces are available for additional flexibility.

**DYNAMIC PEAK MANAGER** - The Dynamic Peak Manager is a modern MPP-Tracking algorithm that dynamically adjusts in search of the optimal operating point. It has the ability to find the global Maximum Power Point (GMPP), even under partial shading.

**MULTI FLOW TECHNOLOGY** - With Multi Flow technology, the inverter can simultaneously process different DC and AC energy flows. It can supply energy from modules and batteries simultaneously to the household and transmit energy from modules to the battery and home network. Additionally, the battery can be charged by both DC and AC circuits (e.g., from existing photovoltaic installations or other energy sources). This allows for efficient cooperation with the AC network and regulation of energy flows, ensuring high self-supply from own energy.

**SUPERFLEX DESIGN** - Fronius SuperFlex Design is an innovative combination of technical features that greatly simplifies the design of photovoltaic installations. Key elements of SuperFlex Design include two MPP trackers, high system voltage, and a wide range of DC input voltages. Each DC input and MPP tracker can accept the full rated power of the inverter, regardless of roof orientation, module shading, or the diversity of panels used. Thanks to this flexibility, the Fronius SuperFlex Design inverter allows meeting the requirements of any project using a single inverter model.

**PV POINT** - Integrated basic emergency power supply function, a socket powered in emergency situations, allows the use of essential devices even during power outages.

**ACTIVE COOLING** - Active cooling technology, using one or more fans, not only eliminates potential overheating areas but also regulates air circulation inside the inverter, maintaining a low temperature of the power electronic system. This process positively affects the durability of the device, optimizes performance, and reduces costs. Active Cooling is a standard technology in all Fronius products.

Technical data of the Fronius Symo GEN24 3.0 Plus inverter:

#### INPUT DATA

Number of MPP trackers: 2

Photovoltaic input power: 3150 W

Max. input current (I<sub>dc</sub> max): 12.5 A / 12.5 A

Max. module field short-circuit current\*: 20.0 A / 20.0 A

DC input voltage range (U<sub>dc</sub> min - U<sub>dc</sub> max): 80-1000 V

Start-up voltage (U<sub>dc</sub> start): 80 V

Nominal input voltage (U<sub>dc,r</sub>): 610 V

MPP voltage range (U<sub>mpp</sub> min - U<sub>mpp</sub> max): 125-800 V

Useful MPP voltage range: 80-800 V

Number of DC connections: 2+1

Max. photovoltaic generator power (P<sub>dc max</sub>): 4.5 kW<sub>peak</sub>

#### OUTPUT DATA

AC nominal power (P<sub>ac,r</sub>): 3000 W

Max. output power (P<sub>ac max</sub>): 3000 VA

Max. power drawn from the grid: 10 VA

Max. AC output current: 8 A

Grid connection (U<sub>ac,r</sub>): 3NPE 230V / 400V, 3NPE 220V / 380V

AC voltage range (U<sub>min</sub> - U<sub>max</sub>): 154-280 V

Frequency (fr): 50 / 60 Hz

Frequency range (f<sub>min</sub> - f<sub>max</sub>): 45-66 Hz

Nonlinear distortion factor: <3% @P<sub>nom</sub> (230/400VAC 50Hz)

Power factor (cos φ<sub>ac,r</sub>): 0.7-1 ind./cap,

Emergency power supply: 1 ~ NPE 220 V / 230 V

Rated AC current output (380VAC): 4.5 A

Rated AC current output (400VAC): 4.3 A

#### GENERAL DATA

Length: 530 mm

Width: 474 mm

Height: 530 mm

Depth: 165 mm

Weight: 15.61 kg

Weight with packaging: 19.35 kg

Degree of protection: IP66

Protection class: 1

Surge category (DC/AC 1): 2/3

Nighttime power consumption: <10 W

Inverter construction concept: Transformerless

Cooling: Regulated ventilation

Installation: Indoor and outdoor installation

Ambient temperature range: -25 - +60°C

Permissible air humidity: 0 - 100%

Maximum altitude above sea level: 3000m / 4000m

PV DC connection technology: 3 DC+ spring-loaded terminals and 3 DC- push-in 2.5-10 mm<sup>2</sup>

Battery DC connection technology: 1 BATT+ spring-loaded terminal and 1 BATT- push-in 2.5-10 mm<sup>2</sup>

AC connection technology: 5-pole AC push-in spring terminals 1.5-10 mm<sup>2</sup>, 3-pole push-in terminals for backup power supply 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, 5 screw terminals PE 2.5-16 mm<sup>2</sup>

Noise emission: 36 dB(A)

#### PROTECTIONS

DC insulation measurement: Yes

Behavior in overload conditions: Work point displacement, power limiter

DC disconnect: Yes

DC pole reversal protection: Yes

Fronius products come with a standard two-year warranty, which can be extended free of charge to 5 years by simple registration on the Fronius Solar.web portal. Registering the inverter on Solar.web offers numerous benefits, including:

- Warranty protection for up to 5 years for registered products.
- Free monitoring of the photovoltaic installation performance on the Fronius Solar.web portal.
- Regular information about new features, accessories, compatible batteries, and home automation solutions.