



# FRONIUS SYMO GEN24 PLUS

The hybrid all-rounder with individual back-up power



## PRELIMINARY DATA



Integrated Data Communication



Dynamic Peak Manager



Multi Flow Technology



SuperFlex Design



Back-up power



PV Point

In power categories from 6.0 to 10.0 kW, the Fronius Symo GEN24 Plus is the ideal hybrid inverter for private households. With various features included as standard it fulfills every customer's needs.

## TECHNICAL DATA FRONIUS SYMO GEN24 PLUS (6.0, 8.0, 10.0)

INPUT DATA	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
Number of MPP trackers		2	
Max. input current ( $I_{dc \max}$ MPPT1 / MPPT2)		25 A / 12.5 A	
Max. array short circuit current (MPPT1/MPPT2)		37.5 A / 18.75 A	
DC input voltage range ( $U_{dc \min}$ - $U_{dc \max}$ )		80 V - 1,000 V	
Nominal input voltage ( $U_{dc,r}$ )		595 V	
Feed-in start voltage ( $U_{dc \text{ start}}$ )		150 V	
Usable MPP voltage range		80 V - 800 V	
Number of DC connections (MPPT1 / MPPT2)	2 / 1	2 / 1	2 / 1
Max. PV generator output ( $P_{dc \max}$ )	9 kW <sub>peak</sub>	12 kW <sub>peak</sub>	15 kW <sub>peak</sub>

OUTPUT DATA	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
AC nominal output ( $P_{ac,r}$ )	6,000 W	8,000 W	10,000 W
Max. output power	6,000 VA	8,000 VA	10,000 VA
Max. output current ( $I_{ac \max}$ )		16.4 A	
Grid connection (voltage range)		3-NPE 400 V / 230 V or 3-NPE 380 V / 220 V (+20 % / - 30%)	
Frequency (frequency range)		50 Hz / 60 Hz (45 Hz - 66 Hz)	
Total harmonic distortion		< 3 %	
Power factor ( $\cos \phi_{ac,r}$ )		0.7 - 1 ind. / cap.	
Back-up power		3-NPE 400 V / 230 V	

OUTPUT DATA PV POINT	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
Nom. output power		3,000 VA	
Nom. output current ( $I_{ac \max}$ )		13 A (25 A)	
Grid connection (voltage range)		1 - NPE 220 V / 230 V	
Frequency (frequency range)		53 Hz / 63 Hz	
Switchover time		> 30 seconds	

BATTERY CONNECTION	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
Number of DC connections		1	
Max. input current ( $I_{dc \max}$ )		22 A	
DC input voltage range ( $U_{dc \min}$ - $U_{dc \max}$ )		160 V - 700 V	
Max. input / output power <sup>1)</sup>	6,250 W	8,330 W	10,420 W
Max. AC charging power	6,000 W	8,000 W	10,000 W

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GENERAL DATA	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
Dimensions (height x width x depth)	594 x 527 x 166 mm		
Weight (inverter / with packaging)	25 / 27 kg		
Degree of protection	IP 66		
Protection class	1		
Nighttime power loss	< 10 W		
Overvoltage category (DC/AC) <sup>2)</sup>	2 / 3		
Inverter design	Transformerless		
Cooling	Regulated air cooling		
Installation	Indoor and outdoor installation		
Ambient temperature range	-25 - +60 °C		
Permitted humidity	0 - 100 %		
Max. altitude	3,000 m / 4,000 m (unrestricted / restricted voltage range)		
DC PV connection technology	3x DC+ and 3x DC- push-in spring terminals 1.5 - 10 mm <sup>2</sup>		
DC battery connection technology	1x BATT+ and 1x BATT- push-in spring terminals 1.5 - 10 mm <sup>2</sup>		
AC connection technology	5 pole AC push-in spring terminals 1.5 - 10 mm <sup>2</sup> 5x PE-screw terminals 2.5 - 16 mm <sup>2</sup>		
Certificates and compliance with standards	VDE V 0126-1-1, VDE-AR-N 4105, ÖVE/ÖNORM E 8001-4-712		
Back-up power functions	PV Point, back-up power <sup>1)</sup>		
Compatible batteries	BYD Battery-Box HV, LG CHEM RESU7H / RESU10H <sup>3)</sup>		

EFFICIENCY	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
Max. efficiency	98.1 %		
Europ. efficiency (η <sub>EU</sub> )	97.1 %		
MPP-tracking efficiency	> 99.9 %		

PROTECTIVE DEVICES	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
DC insulation measurement	Yes		
Overload behaviour	Operating point shift. Power limitation		
DC disconnecter	Yes		
Reverse polarity protection	Yes		

INTERFACES	SYMO GEN24 6.0 PLUS	SYMO GEN24 8.0 PLUS	SYMO GEN24 10.0 PLUS
WLAN / 2x Ethernet LAN	Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON)		
6x digital in/out + 6x digital in	Interface to ripple control receiver, energy management		
USB 2.0 (A-socket)	1 A supply		
Emergency stop (WSD)	Yes		
Datalogger and webserver	Included		
2x RS485	Modbus RTU SunSpec or meter connection, SunSpec, Smart Meter		

<sup>1)</sup> Depending on the connected battery <sup>2)</sup> According to IEC 62109-1 <sup>3)</sup> Compatible soon  
For further information on the availability of this inverter in your country please see [www.fronius.com](http://www.fronius.com).

/ Perfect Welding / Solar Energy / Perfect Charging

### THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 4,550 employees worldwide and 1,241 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at [www.fronius.com](http://www.fronius.com)

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