



Designed to empower.



Fronius Symo
GEN24 SC

Product advantages

- 01 Backup power for every situation
- 02 Built-in freedom
- 03 Versatility as standard
- 04 Sustainably future-proof
- 05 Maximum independence

Product advantages



01 Backup power for every situation

A reliable energy supply: the Fronius GEN24 offers just that with an integrated basic backup power function, the PV Point. With the Fronius GEN24 Plus, you can choose between the PV Point and the Full Backup option, which provides backup power for the entire home.

02 Built-in freedom

The Fronius GEN24 and Fronius GEN24 Plus have open interfaces. This makes it easy to integrate components from Fronius or third-party suppliers for a tailor-made photovoltaic system.

03 Versatility as standard

More functions. More control. More power. Thanks to their energy management functions, the Fronius GEN24 and Fronius GEN24 Plus continuously save time and money. What's more, the integrated active cooling extends the service life of the inverter, protecting your investment for many years to come.

04 Sustainably future-proof

For those who don't want to decide right away: Thanks to the Fronius UP.storage* software upgrade, your device can be retrofitted with the battery connection and therefore the Full Backup power supply at any time.

05 Maximum independence

By combining the Fronius GEN24 Plus with a battery, you can get even more out of your photovoltaic system, even at night. Use more of your own electricity and become more independent of electricity providers and prices.

* Available in the Fronius webshop in selected countries.

Technical data

10.0/12.0 kW

10.0/12.0 kW			Symo GEN24 / GEN24 Plus SC							
			10.0 AUS			12.0				
Input data	Number of MPP trackers		2							
	DC input voltage range (U _{dc min} - U _{dc max})	V	80 - 1,000							
	Nominal input voltage (U _{dc,r})	V	610							
	Feed-in start-up input voltage (U _{dc start})	V	80							
	Usable MPP voltage range	V	80 - 800							
	MPP voltage range (at rated power) (U _{mpp min} - U _{mpp max})	V	295 - 800							
			MPPT1		MPPT2		MPPT1		MPPT2	
	Max. usable input current (I _{dc max})	A	28		14		28		14	
	Max. array short circuit current (I _{sc pv}) ¹	A	40		20		40		20	
	Number of DC connections		2		1		2		1	
			MPPT1	MPPT2	Total	MPPT1	MPPT2	Total		
	Max. usable DC power	W	10,300	8,600	10,300	12,360	8,600	12,360		
	Max. PV generator output	W _{peak}	12,500	9,000	15,000	14,000	9,000	18,000		
Output data	AC rated power (P _{ac,r})	W	9,999			12,000				
	Apparent power	VA	9,999			12,000				
	Max. output power	VA	9,999			12,000				
			380 Vac		400 Vac		380 Vac		400 Vac	
	Nom. AC output current	A	15.2		14.5		18.2		17.4	
	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	%	< 3.5							
	Power factor (cos φ _{ac,r})		0.7 - 1 ind. / cap.							
Output data PV Point	Nom. output power PV Point (Comfort)	VA	3,000							
	Grid connection PV Point (Comfort)	V	1~ NPE 220/230							
	Switching time	sec.	< 23							



Full Backup power and battery function only available with GEN24 Plus

			Symo GEN24 Plus SC	
			10.0 AUS	12.0
Output data Full Backup ²	Nom. output power Full Backup	VA	9,999	12,000
	Grid connection Full Backup	V	3~ NPE 400/230 or 3~ NPE 380/220	
	Switching time	sec.	< 35	
Battery connection	Number of DC inputs		1	
	Max. input current ($I_{dc\ max}$)	A	22	
	DC input voltage range ($U_{dc\ min} - U_{dc\ max}$)	V	160 - 531	
	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	10,300	11,682
	Max. charging power for AC coupling ³	W	9,999	11,682
	Compatible batteries ⁴		BYD Battery-Box Premium HVS/HVM ⁵ & LG FLEX	

¹ $I_{sc\ pv} = I_{sc\ max} \geq I_{sc} (STC) \times 1.25$ according to e.g. IEC 60364-7-712, NEC 2020, AS/NZS 5033:2021.

² 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 HVS 12.8, HVM 8.3

Technical data

10.0/12.0 kW

			Symo GEN24 / GEN24 Plus SC	
			10.0 AUS	12.0
General data	Dimensions (height × width × depth)	mm	595 × 529 × 180	
	Weight (inverter/with packaging)	kg	22,8 / 28,0	
	Protection class		IP 66	
	Safety class		1	
	Night consumption	W	<10	
	Overvoltage category (DC/AC) ⁶		2/3	
	Cooling		Active Cooling technology	
	Installation		Indoor and outdoor installation	
	Ambient temperature range	°C	-25 to +60	
	Permissible humidity	%	0 - 100	
	Noise emissions	dB (A)	< 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 mm²	
	AC connection technology		5-pin AC push-in spring terminals 1.5 - 10 mm² 3-pin backup power push-in spring terminals 1.5 - 10 mm² 5 × PPE screw terminals 2.5 - 16 mm²	
	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	
	Life cycle analysis		In accordance with ÖNORM EN ISO 14040 and 14044 (checked by employees from Fraunhofer IZM)	
Efficiency	Max. efficiency	%	98.3	98.3
	Euro. efficiency (ηEU)	%	98.1	98
	MPP adaptation efficiency	%	> 99.9	
Protection devices	DC isolation measurement		Integrated	
	DC disconnect		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, 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

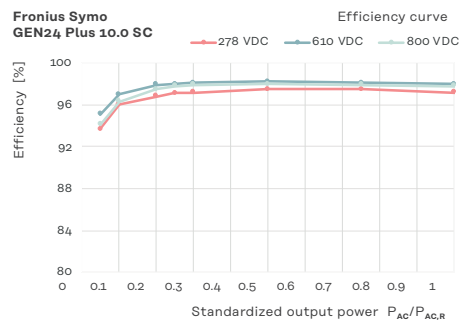
⁸ Full Backup power ist only available with GEN24 Plus.

For further information on the availability of the inverters in your country, please visit www.fronius.com.

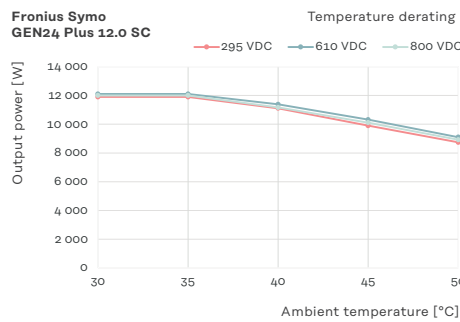
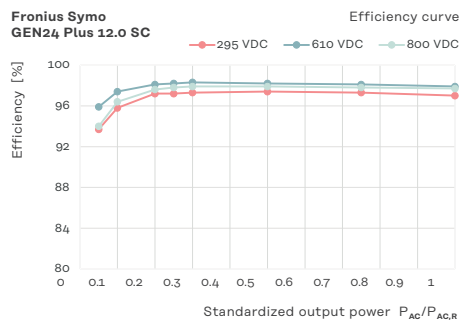
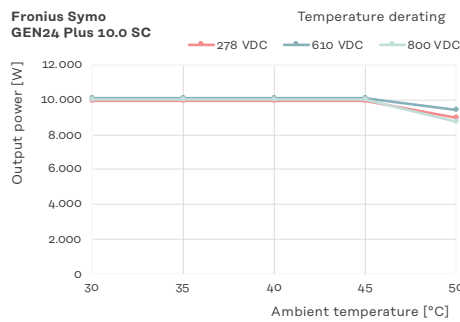
Impressive power data

The Fronius GEN24 and GEN24 Plus impress with premium efficiency and maximum power at high temperatures.

Efficiency



Power derating





Offering proven quality with even more power for the private home

For further information, please visit
www.fronius.com/gen24-inverter

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