



Designed to empower.

Product advantages

- 01 Maximum flexibility
- 02 Backup power for every situation
- 03 Easy installation
- 04 Support and tools

Sustainable, reliable, future-proof: using our Fronius GEN24 Plus inverter as the heart of a photovoltaic system lets you flexibly and economically produce energy yourself. You can connect a battery system to the hybrid inverter to use the solar energy that you produce for electricity, heating, cooling, and e-mobility. Full solar power for your private energy revolution with the **Fronius GEN24 Plus. Designed to empower.**

The heart of the photovoltaic system

01 Maximum flexibility

With the Fronius GEN24 Plus as the heart of the photovoltaic system, you will do a whole lot more than launch your own personal energy revolution; you will also gain access to all the possibilities and benefits of solar energy.

02 Backup power for every situation

Your energy supply must be reliable: with the Fronius GEN24 Plus, you can choose either "PV Point" or "Full Backup", a backup power supply for the entire household.

03 Easy installation

Save time and money: fast and safe installation with 180° quick-fastener screws, push-in spring terminals, and a well-designed wall assembly system.

04 Support and tools

Never-ending support: free and efficient Fronius solutions are available for planning, installation, and system monitoring. This increases customer satisfaction and minimizes maintenance effort.

Fronius GEN24 Plus* | Backup power versions | Battery connection

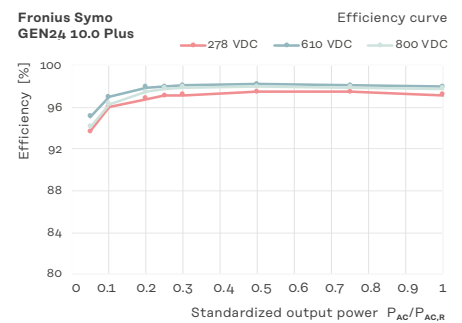
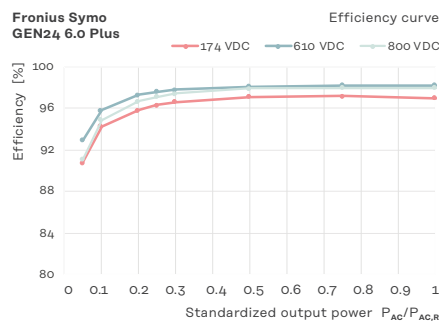
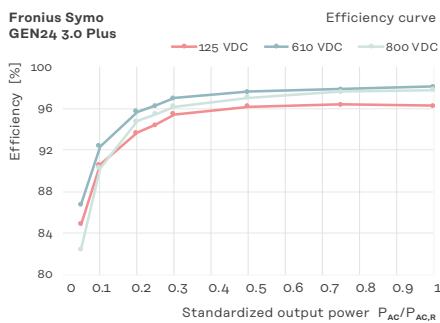
* The Full Backup option is available for the Primo GEN24 3.0–6.0 Plus and the Symo GEN24 6.0–10.0 Plus.



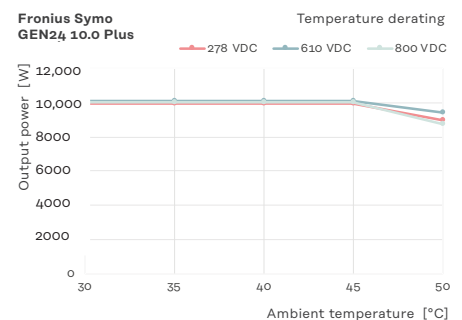
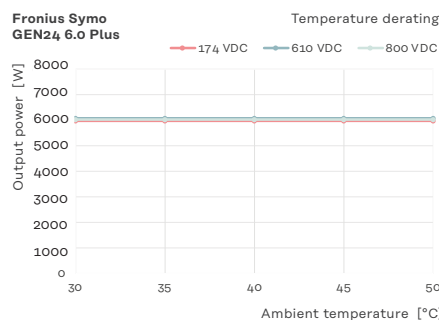
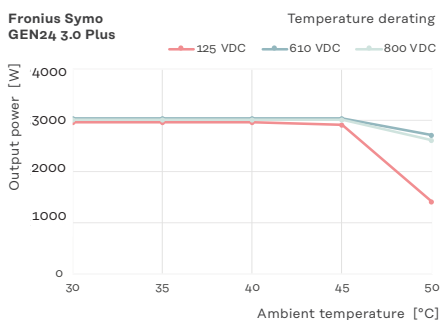
Impressive power data

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

Efficiency



Power derating



Technical data

3.0 / 4.0 / 5.0 kW

			Symo GEN24 Plus								
			3.0			4.0			5.0		
Input data	Number of MPP trackers		2			2			2		
	DC input voltage range (U _{dc min} - U _{dc max})	V	80 - 1000			80 - 1000			80 - 1000		
	Nominal 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		
			MPPT1	MPPT2		MPPT1	MPPT2		MPPT1	MPPT2	
	Max. usable input current (I _{dc max})	A	12.5		12.5	12.5		12.5	12.5		12.5
	Max. short circuit current, module array	A	18.75		18.75	18.75		18.75	18.75		18.75
	Number of DC connections		2		1	2		1	2		1
			MPPT1	MPPT2	Total	MPPT1	MPPT2	Total	MPPT1	MPPT2	Total
	Max. usable DC power	W	3150	3150	3150	4180	4180	4180	5200	5200	5200
	Max. PV generator output	kWp	4.5	4.5	4.5	6	6	6	6.5	6.5	7.5
Output data	AC rated power (P _{ac,r})	W	3000			4000			5000		
	Apparent power	VA	3000			4000			5000		
	Max. output power	VA	3000			4000			5000		
			380 VAC	400 VAC		380 VAC	400 VAC		380 VAC	400 VAC	
	Nom. AC output current (@ 220/230 V)	A	4.5	4.3		6.1	5.8		7.6	7.2	
	Grid connection (U _{ac,r})	V	3~ EN 400/230 or 3~ EN 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	VA	3000			3000			3000		
	Grid connection PV Point	V	1~ EN 220/230								
	Switching time	sec.	< 90								
Output data FULL Backup ¹	Nom. output power Full Backup	VA	The Full Backup backup power function is available for the Symo GEN24 6.0-10.0 Plus.								
	Nominal phase power Full Backup	VA									
	Grid connection Full Backup	V									
	Switching time	sec.									
Battery connection	Number of DC inputs		1			1			1		
	Max. input current (I _{dc max})	A	12.5			12.5			12.5		
	DC input voltage range (U _{dc min} - U _{dc max})	V	160 - 531			160 - 531			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 ²	W	3150			4180			5200		
	Max. charging power for AC coupling ²	W	3000			4000			5000		
	Compatible batteries		BYD Battery-Box Premium HVS/HVM ³								

¹ 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.

² Depending on connected battery

³ Except for HVS 12.8 and HVM 8.3

			Symo GEN24 Plus		
			3.0	4.0	5.0
General data	Dimensions (height × width × depth)	mm	530 × 474 × 165		
	Weight (inverter/with packaging)	kg	15.6/19.4	15.6/19.4	15.6/19.4
	Protection class		IP 66	IP 66	IP 66
	Safety class		1	1	1
	Night consumption	W	<10	<10	<10
	Overvoltage category (DC/AC) ⁴		2/3	2/3	2/3
	Inverter concept		Transformerless		
	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)	< 36	< 36	< 36
	Max. altitude above sea level	m	3,000/4,000 (unrestricted/restricted voltage range)		
	DC connection technology PV		3x DC+ and 3x 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 5x PE screw terminals 2.5 - 16 mm ²		
	Certificates and compliance with standards ⁵		IEC 62109, IEC 62116, IEC 61727, IEC 62909, VDE 0126, VDE AR-N4105, AS/NZS 4777.2, EN 50549, CEI 0-21, G 98, R25		
Backup power functions		PV Point			
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	%	98.1	98.2	98.2
	Euro. efficiency (η _{EU})	%	96.7	97.2	97.5
	MPP adaptation efficiency	%	> 99.9	> 99.9	> 99.9
Protection devices	DC isolation measurement		Integrated		
	Overload performance		Operating point shift, power limiter		
	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, Fronius Ohmpilot		

⁴ 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

⁵ You can find the current certificates under www.fronius.com/symo-gen24-plus-cert

Technical data

6.0 / 8.0 / 10.0 kW

			Symo 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 - 1000			80 - 1000			80 - 1000			
	Nominal 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			
			MPPT1	MPPT2		MPPT1	MPPT2		MPPT1	MPPT2		
	Max. usable input current (I _{dc max})	A	25		12.5		25		12.5		25	
	Max. short circuit current, module array	A	37.5		18.75		37.5		18.75		37.5	
	Number of DC connections		2		1		2		1		2	
			MPPT1	MPPT2	Total	MPPT1	MPPT2	Total	MPPT1	MPPT2	Total	
	Max. usable DC power	W	6220	6000	6220	8260	6000	8260	10,300	6000	10,300	
Max. PV generator output	kWp	7.5	6.5	9	10	7	12	12.5	7.5	15		
Output data	AC rated power (P _{ac,r})	W	6000			8000			10,000			
	Apparent power	VA	6000			8000			10,000			
	Max. output power	VA	6000			8000			10,000			
			380 VAC	400 VAC		380 VAC	400 VAC		380 VAC	400 VAC		
	Nom. AC output current (@ 220/230 V)	A	9.1		8.7		12.1		11.6		15.2	
	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	VA	3000			3000			3000			
	Grid connection PV Point	V	1~ NPE 220/230									
	Switching time	sec.	< 90									
Output data FULL Backup ¹	Nom. output power Full Backup	VA	6000			8000			10,000			
	Nominal phase power Full Backup	VA	3680			3680			3680			
	Grid connection Full Backup	V	3~ NPE 400/230 or 3~ NPE 380/220									
	Switching time	sec.	< 90									
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 - 531			160 - 531			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 ²	W	6220			8260			10,300			
	Max. charging power for AC coupling ²	W	6000			8000			10,000			
	Compatible batteries		BYD Battery-Box Premium HVS/HVM ³									

¹ 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.

² Depending on connected battery

³ Except for HVS 12.8 and HVM 8.3

			Symo 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) ⁴		2/3	2/3	2/3
	Inverter concept		Transformerless		
	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	3000/4000 (unrestricted/restricted voltage range)		
	DC connection technology PV		3x DC+ and 3x 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 5x PE screw terminals 2.5 - 16 mm ²		
	Certificates and compliance with standards ⁵		IEC 62109, IEC 62116, IEC 61727, IEC 62909, VDE 0126, VDE AR-N4105, AS/NZS 4777.2, EN 50549, CEI 0-21, G 98, R25		
Backup power functions		PV Point			
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 (ηEU)	%	97.7	97.8	97.9
	MPP adaptation efficiency	%	> 99.9	> 99.9	> 99.9

Protection devices	DC isolation measurement		Integrated		
	Overload performance		Operating point shift, power limiter		
	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, Fronius Ohmpilot		

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

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