



# Designed to empower.



Fronius Primo  
GEN24 and  
GEN24 Plus

---

## Product advantages

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

# The heart of the photovoltaic system



## 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: With the Fronius UP.storage\* software upgrade, the Fronius GEN24 can be retrofitted with a 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.

# 2

The Fronius GEN24 is  
available in two versions:

- As an inverter: **Fronius GEN24**  
integrated backup power function
- As a hybrid inverter: **Fronius GEN24 Plus**  
battery connection  
two backup power options

# Technical data

## 8.0/10.0 kW

			Primo GEN24/GEN24 Plus				
			8.0		10.0		
Input data	Number of MPP trackers		2		2		
	DC input voltage range (U <sub>dc min</sub> - U <sub>dc max</sub> )	V	65 - 600		65 - 600		
	Rated input voltage (U <sub>dc,r</sub> )	V	400		400		
	Feed-in start-up input voltage (U <sub>dc start</sub> )	V	80		80		
	Usable MPP voltage range	V	65 - 480		65 - 480		
	MPP voltage range (at rated power) (U <sub>mpp min</sub> - U <sub>mpp max</sub> )	V	260 - 480		260 - 480		
			MPPT1	MPPT2	MPPT1	MPPT2	
	Max. usable input current (I <sub>dc max</sub> )	A	22	22	22	22	
	Max. array short circuit current (I <sub>sc pv</sub> ) <sup>1</sup>	A	41.25	36	41.25	36	
	Number of DC connections		2	2	2	2	
			MPPT1	MPPT2	Total	MPPT1	MPPT2
Max. usable DC power	W	8,260	8,260	8,260	10,360	10,360	10,360
Max. PV generator output	W <sub>peak</sub>	10,000	10,000	12,000	12,500	12,500	15,000

Output data	AC rated power (P <sub>ac,r</sub> )	W	8,000		9,999	
	Apparent power	VA	8,000		9,999	
	Max. output power	VA	8,000		9,999	
			220 Vac	230 Vac	220 Vac	230 Vac
	Rated AC output current	A	36.4	34.8	45.5	43.5
	Grid connection (U <sub>ac,r</sub> )	V	1~ NPE 220/230 (+20 %/-30 %)			
	Frequency (frequency range f <sub>min</sub> - f <sub>max</sub> )	Hz	50/60 (45 - 65)			
	Total harmonic distortion	%	< 3		< 3	
Power factor (cos φ <sub>ac,r</sub> )		0,8 - 1 ind. / cap.				

Output data PV Point	Rated output power PV Point (Comfort)	VA	3,000		3,000	
	Grid connection PV Point (Comfort)	V	1~ NPE 220/230			
	Switching time	sec.	~20		~20	



**Full Backup power and battery function only available with GEN24 Plus**

			Primo GEN24 Plus			
			8.0		10.0	
Output data Full Backup <sup>2</sup>	Rated output power Full Backup	VA	8,000		9,999	
	Grid connection Full Backup	V	1~ NPE 220/230			
	Switching time	sec.	~10		~10	

Battery connection	Number of DC inputs		1		1	
	Max. input current (I <sub>dc max</sub> )	A	22		22	
	DC input voltage range (U <sub>dc min</sub> - U <sub>dc max</sub> ) <sup>3</sup>	V	150 - 455		150 - 455	
	DC battery connection technology		1x BATT+ and 1x BATT- push-in spring terminals 2.5 - 10 mm <sup>2</sup>			
	Max. DC input/output power <sup>4</sup>	W	8,260		10,360	
	Max. charging power for AC coupling <sup>4</sup>	W	8,000		9,999	
Compatible batteries <sup>5</sup>		BYD Battery-Box Premium HVS/HVM <sup>6</sup>				

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

<sup>2</sup> The Full Backup option is available for the Primo GEN24 3.0–10.0 Plus. Additional external components for grid switchover are required for the Full Backup. See the Operating Instructions for further details.

<sup>3</sup> AC power derating of the inverter occurs with a DC battery input voltage of 419.7 V and higher

<sup>4</sup> Depending on connected battery

<sup>5</sup> Depending on the country-specific certification and availability

<sup>6</sup> Excluding BYD Battery-Box Premium HVS 10.2, HVS 12.8, HVM 8.3, HVM 22.1

			Primo GEN24/GEN24 Plus	
			8.0	10.0
General data	Dimensions (height × width × depth)	mm	595 x 529 x 180	
	Weight (inverter/with packaging)	kg	21 / 26	21 / 26
	Protection class		IP 66	IP 66
	Safety class		1	1
	Night consumption	W	< 10	< 10
	Overvoltage category (DC/AC) <sup>7</sup>		2/3	2/3
	Cooling		Active Cooling technology	
	Installation		Indoor and outdoor installation	
	Ambient temperature range	°C	-40 to +60	-40 to +60
	Permissible humidity	%	0 - 100	0 - 100
	Noise emissions	dB (A)	< 51	< 51
	Max. altitude above sea level	m	4,000	4,000
	DC connection technology PV		4x DC+ and 4x DC- push-in spring terminals 2.5 - 10 mm <sup>2</sup>	
	AC connection technology		3-pin AC push-in spring terminals 2.5 - 10 mm <sup>2</sup> 3-pin backup power push-in spring terminals 1.5 - 10 mm <sup>2</sup> 2x PE screw terminals 2.5–16 mm <sup>2</sup> and 3x 2.5 - 10 mm <sup>2</sup>	
	Certificates and compliance with standards <sup>8</sup>		IEC 62109, IEC 62909, AS/NZS 4777.2, IEC 62116, IEC 61727 ABNT BNR 16149 und 16150, IEC 62116, IEC 61727	
Backup power functions <sup>9</sup>		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	%	97.3	97.3
	Euro. efficiency (η <sub>EU</sub> )	%	96.9	97.0
	MPP adaptation efficiency	%	> 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	

<sup>7</sup> 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

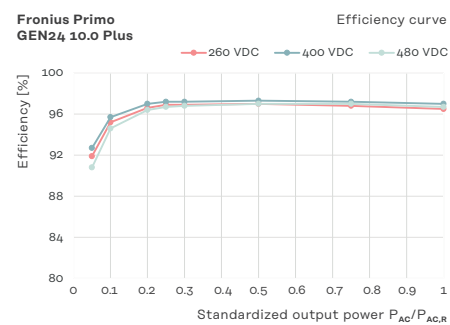
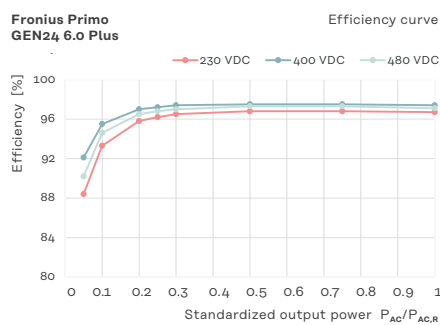
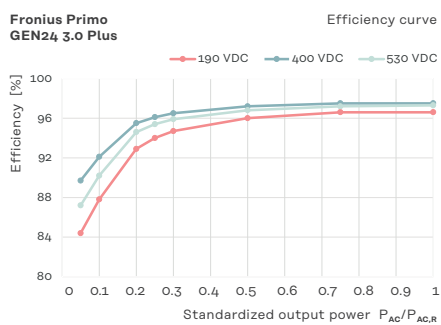
<sup>8</sup> You can find the current certificates under [www.fronius.com/primogen24-plus-cert](http://www.fronius.com/primogen24-plus-cert)

<sup>9</sup> Full Backup power and battery function only available with GEN24 Plus

# Impressive Power Data

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

## Efficiency



## Power derating

