



FRONIUS PRIMO GEN24 & GEN24 PLUS

The hybrid all-rounder with individual backup power

Fronius Primo GEN24



Integrated Data Communication



Dynamic Peak Manager



Multi Flow Technology



SuperFlex Design



PV Point basic grid backup

The Fronius Primo GEN24 is the perfect solar inverter for single phase homes. The Austrian-built inverter is leagues ahead of the rest of the market.

- » Dynamic Peak Manager gives a superior ability to adapt to changing conditions and shade while maximising production.
- » The new and improved fan and heat sink is quieter and more efficient at keeping the electronics cool to ensure performance and longevity.
- » Arc Fault Circuit Interruption (AFCI) gives an extra level of security against arcs.
- » PV Point allows for limited daytime backup power without the need for a battery. If a battery is required, the GEN24 can be upgraded with Fronius UP.



Fronius UP

Fronius UP is a software upgrade that turns the Fronius GEN24 inverter into the Fronius GEN24 Plus.

The GEN24 Plus inverter is then compatible with the BYD Battery, a modular and robust battery solution.



Fronius GEN24 + Fronius UP Software = Fronius GEN24 Plus



Watch Mark's review of the Fronius GEN24: mce.solar/Primo810

Fronius Primo GEN24 Plus



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Full backup

The Fronius GEN24 Plus and BYD Battery solution can be sized to suit your budget and energy needs.

- » Store excess solar power for night-time usage
- » Reduce your energy costs and earn more from exported battery energy when you join a Virtual Power Plant (VPP)
- » Ensure energy security in case of a blackout



Watch Mark's Fronius and BYD Battery Sizing Guide: mce.solar/bydfronius



TECHNICAL DATA FRONIUS PRIMO GEN24 & GEN24 PLUS (4.0, 4.6, 5.0, 6.0, 8.0, 10.0)

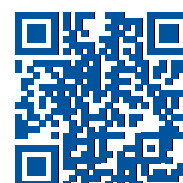
GENERAL DATA	PRIMO 4.0	PRIMO 4.6	PRIMO 5.0	PRIMO 6.0	PRIMO 8.0	PRIMO 10.0
Dimensions (height x width x depth)	530 x 474 x 165 mm	530 x 474 x 165 mm	530 x 474 x 165 mm	530 x 474 x 165 mm	595 x 529 x 180 mm	595 x 529 x 180 mm
Weight (inverter / with packaging)	15.4 / 19 kg	15.4 / 19 kg	15.4 / 19 kg	15.4 / 19 kg	21 / 26 kg	21 / 26 kg
Degree of protection	IP 66					
Safety class	1					
Night-time consumption	<10 W					
Overvoltage category (DC/AC) ¹⁾	2/3					
Inverter concept	Transformerless					
Cooling	Active Cooling Technology					
Installation	Indoor and outdoor installation					
Ambient temperature range	-40 to +60°C					
Permissible humidity	0 - 100 %					
Noise emission	< 42 dB (A)	< 42 dB (A)	< 42 dB (A)	< 42 dB (A)	< 51 dB (A)	< 51 dB (A)
Max. altitude	4,000 m					
DC PV connection technology	4 x DC+ and 4 X DC- push-in tension clamp terminals 2.5 - 10mm ²					
Back-up power functions ²⁾	PV Point and Full Backup					
Producing country	Austria					
Compatible batteries	BYD Battery-Box Premium HVS / HVM					
INPUT DATA	PRIMO 4.0	PRIMO 4.6	PRIMO 5.0	PRIMO 6.0	PRIMO 8.0	PRIMO 10.0
Number of MPP trackers	2					
Max. input current ($I_{dc,max,MPPT1/MPPT2}$)	22 A / 12 A					
Max. array short circuit current (MPPT1 / MPPT2)	33 A / 18 A	33 A / 18 A	33 A / 18 A	33 A / 18 A	41.25 A / 36 A	41.25 A / 36 A
DC input voltage range ($U_{dc,min} - U_{dc,max}$)	65 - 600 V					
Nominal input voltage ($U_{dc,r}$)	400 V					
Feed-in start voltage ($U_{dc,start}$)	80 V					
Usable MPP voltage range	65 V - 530 V	65 V - 530 V	65 V - 530 V	65 V - 480 V	65 V - 480 V	65 V - 480 V
Number of DC connections (MPPT1 / MPPT2)	2 / 2					
Max. PV generator output ($P_{dc,max}$)	6.0kW _{peak}	6.9kW _{peak}	7.5kW _{peak}	9.0kW _{peak}	12.0kW _{peak}	15.0kW _{peak}
OUTPUT DATA	PRIMO 4.0	PRIMO 4.6	PRIMO 5.0	PRIMO 6.0	PRIMO 8.0	PRIMO 10.0
AC nominal output ($P_{ac,r}$)	4,000 W	4,600 W	5,000 W	6,000 W	8,000 W	10,000 W
Max. output power	4,000 VA	4,600 VA	5,000 VA	6,000 VA	8,000 VA	10,000 VA
Max. output current ($I_{ac,max}$)	25.80 A	27.50 A	27.50 A	27.50 A	34.80 A	43.5 A
Grid connection (voltage range)	1~NPE 220 V / 230 V (+20 % / -30 %)					
Frequency (frequency range)	50 Hz / 60 Hz (45 Hz - 65 Hz)					
Total harmonic distortion	<3.5%					
Power factor (cos $\Phi_{ac,r}$)	0.8 - 1 ind. / cap.					
Back-up power	1~NPE 220 V / 230 V					
OUTPUT DATA PV POINT / FULL BACKUP	PRIMO 4.0	PRIMO 4.6	PRIMO 5.0	PRIMO 6.0	PRIMO 8.0	PRIMO 10.0
Nom. output power PV Point / full backup	3,000 VA / 4,000 VA	3,000 VA / 4,600 VA	3,000 VA / 5,000 VA	3,000 VA / 6,000 VA	3,000 VA / 8,000 VA	3,000 VA / 10,000 VA
Grid connection (voltage range) PV Point	1~NPE 220 V / 230 V					
Grid connection (voltage range) full backup	1~NPE 220 V / 230 V					
Switchover time	< 40 seconds	< 40 seconds	< 40 seconds	< 40 seconds	< 35 seconds	< 35 seconds
BATTERY CONNECTION	PRIMO 4.0	PRIMO 4.6	PRIMO 5.0	PRIMO 6.0	PRIMO 8.0	PRIMO 10.0
Number of DC connections	1					
Max. input current ($I_{dc,max}$)	22 A					
DC input voltage range ($U_{dc,min} - U_{dc,max}$)	150 V - 455 V					
Max. input / output power ³⁾	4,230 W	4,860 W	5,290 W	6,340 W	8,260 W	10,360 W
Max. AC charging power	4,000 W	4,600 W	5,000 W	6,000 W	8,000 W	10,000 W
EFFICIENCY	PRIMO 4.0	PRIMO 4.6	PRIMO 5.0	PRIMO 6.0	PRIMO 8.0	PRIMO 10.0
Max. efficiency	97.6 %	97.6 %	97.6 %	97.6 %	97.3 %	97.3 %
European efficiency (η_{EU})	97.1 %	97.2 %	97.2 %	97.1 %	96.9 %	97.0 %
MPP-tracking efficiency	> 99.9 %					

¹⁾ According to IEC 62109-1. Optional retrofit surge protection device DC SPD type 1+2 for 2 MPP trackers available under the following article number. 4,240,313,CK

²⁾ Full backup and battery function only available with GEN24 Plus

³⁾ Depending on the connected battery

You can find the current certificates at fronius.com/primo-gen24-plus-cert
 Visit www.mcelectrical.com.au for more information



Watch Mark's video about why we only install Fronius inverters:
mce.solar/whyfronius