

/ Perfect Welding / Solar Energy / Perfect Charging



SHIFTING THE LIMITS

FRONIUS PRIMO

/ Optimised energy management.



/ SnapINverter Technology



/ Integrated data communication



/ SuperFlex Design



/ Dynamic Peak Manager



/ Smart Grid Ready

/ The Fronius Primo in power categories from 3.0 to 8.2 kW perfectly completes the new SnapINverter generation. This single-phase device is the ideal inverter for residential systems. Its innovative SuperFlex Design provides maximum flexibility in system design, while the SnapINverter mounting system makes installation and maintenance easier than ever before. The included communication package, with WLAN, energy management, several interfaces and much more, allows the Fronius Primo to communicate with the user, the PV system and the grid.

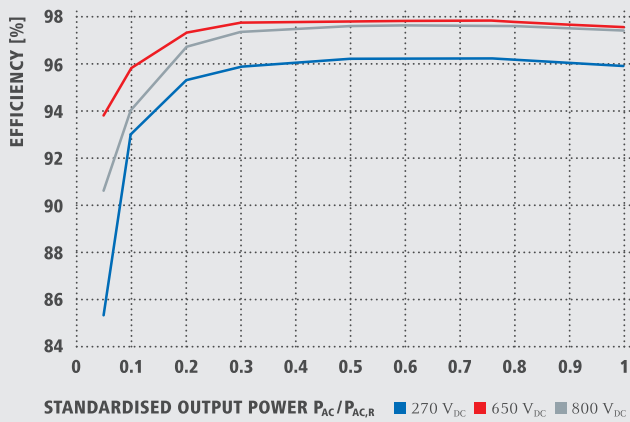
TECHNICAL DATA FRONIUS PRIMO (3.0-1, 3.5-1, 3.6-1, 4.0-1, 4.6-1)

INPUT DATA	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1 ¹⁾	PRIMO 4.0-1	PRIMO 4.6-1 ¹⁾
Max. input current ($I_{dc \max 1} / I_{dc \max 2}$)			12.0 A / 12.0 A		
Max. array short circuit current (MPP ₁ /MPP ₂)			18.0 A / 18.0 A		
Min. input voltage ($U_{dc \min}$)			80 V		
Feed-in start voltage ($U_{dc \text{ start}}$)			80 V		
Nominal input voltage ($U_{dc, r}$)			700 V		
Max. input voltage ($U_{dc \max}$)			1,000 V		
Usable MPP voltage range ($U_{mpp \min} - U_{mpp \max}$)			80 V - 800 V		
MPP voltage range at nominal power ($U_{mpp \min} - U_{mpp \max}$)		200 - 800 V		210 - 800 V	240 - 800 V
Number of MPP trackers			2		
Number of DC connections			2 + 2		

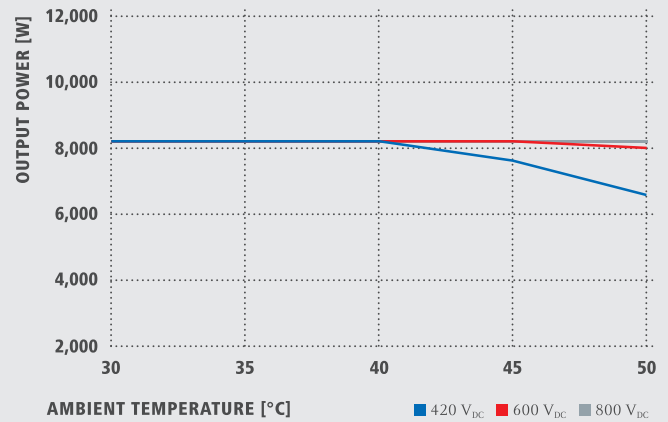
OUTPUT DATA	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1 ¹⁾	PRIMO 4.0-1	PRIMO 4.6-1 ¹⁾
AC nominal output ($P_{ac, r}$)	3,000 W	3,500 W	3,680 W	4,000 W	4,600 W
Max. output power	3,000 VA	3,500 VA	3,680 VA	4,000 VA	4,600 VA
AC output current ($I_{ac \text{ nom}}$)	13.0 A	15.2 A	16.0 A	17.4 A	20.0 A
Grid connection (voltage range)	1 - NPE 220 V / 230 V (180 V - 270 V)				
Frequency (frequency range)	50 Hz / 60 Hz (45 - 65 Hz)				
Total harmonic distortion	< 5 %				
Power factor ($\cos \varphi_{ac, r}$)	0.85 - 1 ind. / cap.				

¹⁾ Available upon request, conditions apply.

FRONIUS PRIMO 8.2-1 EFFICIENCY CURVE



FRONIUS PRIMO 8.2-1 TEMPERATURE DERATING



TECHNICAL DATA FRONIUS PRIMO (5.0-1, 5.0-1 AUS, 6.0-1, 8.2-1)

INPUT DATA	PRIMO 5.0-1 ¹⁾	PRIMO 5.0-1 AUS	PRIMO 6.0-1	PRIMO 8.2-1
Max. input current ($I_{dc \max 1} / I_{dc \max 2}$)	12.0 A / 12.0 A		18.0 A / 18.0 A	
Max. array short circuit current (MPP ₁ /MPP ₂)	18.0 A / 18.0 A		27.0 A / 27.0 A	
Min. input voltage ($U_{dc \min}$)			80 V	
Feed-in start voltage ($U_{dc \text{ start}}$)			80 V	
Nominal input voltage ($U_{dc,n}$)			700 V	
Max. input voltage ($U_{dc \max}$)			1,000 V	
Usable MPP voltage range ($U_{mpp \min} - U_{mpp \max}$)			80 V - 800 V	
MPP voltage range at nominal power ($U_{mpp \min} - U_{mpp \max}$)		240 - 800 V		270 - 800 V
Number of MPP trackers		2		
Number of DC connections		2 + 2		

OUTPUT DATA	PRIMO 5.0-1 ¹⁾	PRIMO 5.0-1 AUS	PRIMO 6.0-1	PRIMO 8.2-1
AC nominal output ($P_{ac,n}$)	5,000 W	4,600 W	6,000 W	8,200 W
Max. output power	5,000 VA	5,000 VA	6,000 VA	8,200 VA
AC output current ($I_{ac \text{ nom}}$)	21.7 A	21.7 A	26.1 A	35.7 A
Grid connection (voltage range)		1 - NPE 220 V / 230 V (180 V - 270 V)		
Frequency (frequency range)		50 Hz / 60 Hz (45 - 65 Hz)		
Total harmonic distortion		< 5 %		
Power factor ($\cos \varphi_{ac,n}$)		0.85 - 1 ind. / cap.		

GENERAL DATA	PRIMO 5.0-1 ¹⁾	PRIMO 5.0-1 AUS	PRIMO 6.0-1	PRIMO 8.2-1
Dimensions (height x width x depth)		645 x 431 x 204 mm		
Weight		21.5 kg		
Degree of protection		IP 65		
Protection class		1		
Overvoltage category (DC / AC) ²⁾		2 / 3		
Night time consumption		< 1 W		
Inverter design		Transformerless		
Cooling		Regulated air cooling		
Installation		Indoor and outdoor installation		
Ambient temperature range		-40 - +55 °C		
Permitted humidity		0 - 100 %		
Max. altitude		4,000 m		
DC connection technology		2x DC+1, 2x DC+2 and 4x DC- screw terminals 2.5 - 16 mm ²		
Mains connection technology		3-pole AC screw terminals 2.5 - 16 mm ²		
Certificates and compliance with standards		DIN V VDE 0126-1-1/A1, IEC 62109-1/-2, IEC 62116, IEC 61727, AS 3100, AS 4777-2, AS 4777-3, G83/2, G59/3, CEI 0-21		

¹⁾ Available upon request, conditions apply. ²⁾ According to IEC 62109-1. Further information regarding the availability of the inverters in your country can be found at www.fronius.com.