



/ Perfect Welding / Solar Energy / Perfect Charging



# FRONIUS PRIMO

The communicative inverter for optimised energy management.



SnapINverter Technology



Integrated data communication



SuperFlex Design



Dynamic Peak Manager



Smart Grid Ready



Zero feed-in

The Fronius Primo in power categories from 3.0 to 8.2 kW perfectly completes the SnapINverter generation. This single-phase, transformerless device is the ideal inverter for private households.

Its innovative SuperFlex Design provides maximum flexibility in system design, while the SnapINverter mounting system makes installation and maintenance easier than ever before. The communication package included as standard, with WLAN, energy management, several interfaces and much more besides, makes the Fronius Primo a communicative inverter for owner-occupiers.

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

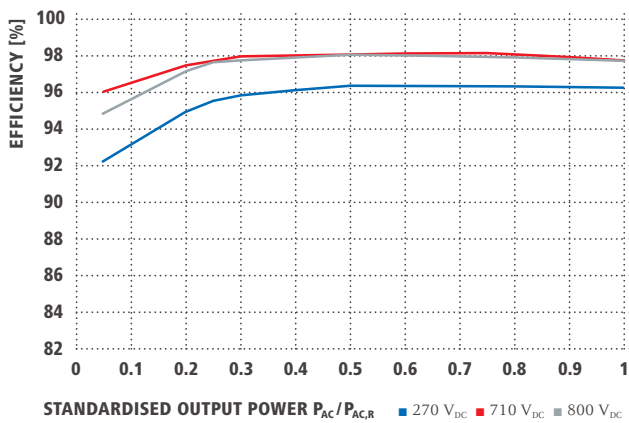
INPUT DATA	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
Number of MPP trackers			2		
Max. input current (I <sub>dc max 1</sub> / I <sub>dc max 2</sub> )			12.0 A / 12.0 A		
Max. array short circuit current (MPP 1/MPP 2)			18.0 A / 18.0 A		
DC input voltage range (U <sub>dc min</sub> - U <sub>dc max</sub> )			80 - 1000 V		
Feed-in start voltage (U <sub>dc start</sub> )			80 V		
Usable MPP voltage range			80 - 800 V		
Number of DC connections			2 + 2		
Max. PV generator output (P <sub>dc max</sub> )	4.5 kW <sub>peak</sub>	5.3 kW <sub>peak</sub>	5.5 kW <sub>peak</sub>	6.0 kW <sub>peak</sub>	6.9 kW <sub>peak</sub>

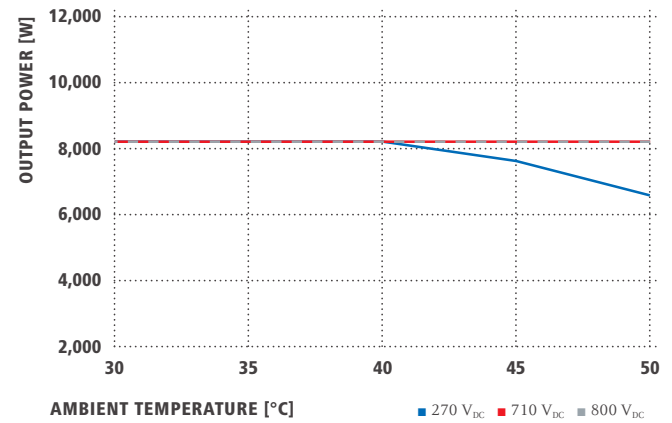
OUTPUT DATA	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
AC nominal output (P <sub>ac,r</sub> )	3,000 W	3,500 W	3,680 W	4,000 W	4,600 W
Max. output power	3,000 VA	3,500 VA	3,680 VA	4,000 VA	4,600 VA
AC output current (I <sub>ac nom</sub> )	13.0 A	15.2 A	16.0 A	17.4 A	20.0 A
Grid connection (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 φ <sub>ac,r</sub> )	0.85 - 1 ind. / cap.				



## 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	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
Number of MPP trackers	2				
Max. input current (I <sub>dc max 1</sub> / I <sub>dc max 2</sub> )	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			
DC input voltage range (U <sub>dc min</sub> - U <sub>dc max</sub> )	80 - 1,000 V				
Feed-in start voltage (U <sub>dc start</sub> )	80 V				
Usable MPP voltage range	80 - 800 V				
Number of DC connections	2 + 2				
Max. PV generator output (P <sub>dc max</sub> )	7.5 kW <sub>peak</sub>	7.5 kW <sub>peak</sub>	7.5 kW <sub>peak</sub>	9.0 kW <sub>peak</sub>	12.3 kW <sub>peak</sub>

OUTPUT DATA	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
AC nominal output (P <sub>ac,r</sub> )	5,000 W	4,600 W	5,000 W	6,000 W	8,200 W
Max. output power	5,000 VA	5,000 VA	5,000 VA	6,000 VA	8,200 VA
AC output current (I <sub>ac nom</sub> )	21.7 A	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 φ <sub>ac,r</sub> )	0.85 - 1 ind. / cap.				

GENERAL DATA	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	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) <sup>1)</sup>	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	4x DC+ and 4x DC- screw terminals 2.5 - 16 mm <sup>2</sup>				
AC connection technology	3-pole AC screw terminals 2.5 - 16 mm <sup>2</sup>				
Certificates and compliance with standards	DIN V VDE 0126-1-1/A1, IEC 62109-1/2, IEC 62116, IEC 61727, AS 4777-2, AS 4777-3, G83/2, G59/3, CEI 0-21, VDE AR N 4105 <sup>2)</sup>				

<sup>1)</sup> According to IEC 62109-1.

<sup>2)</sup> Fronius Primo 5.0-1, Fronius Primo 6.0-1 and Fronius Primo 8.2-1 are not fully compliant with VDE AR N 4105. Further information regarding the availability of the inverters in your country can be found at [www.fronius.com](http://www.fronius.com).