

# FRONIUS PRIMO



/ PC board replacement process



/ SnapINverter mounting system



/ Wireless monitoring



/ Open data communication



/ Smart Grid Ready



/ Arc Fault Circuit Interruption



/ The transformerless Fronius Primo is the ideal compact single-phase inverter for residential and small-scale commercial applications with power categories from 3.8 to 8.2 kW. In accordance with new ESA rules for residential applications, the Fronius Primo can operate efficiently at a maximum input voltage of 600 V. And for increased efficiency and additional cost savings for commercial applications, the Fronius Primo can operate at the maximum input voltage of 1,000 V.

/ Industry-leading features now come standard with the Fronius Primo, including: dual maximum power point tracking, arc fault protection, integrated wireless monitoring and SunSpec Modbus interfaces for seamless monitoring and datalogging via Fronius' online and mobile platform, Fronius Solar.web. *\*Please note: specifications subject to change until start of production.*

## TECHNICAL DATA FRONIUS PRIMO

GENERAL DATA	STANDARD WITH ALL PRIMO MODELS
Dimensions (height x width x depth)	24.7 x 16.9 x 8.1 in. (62.8 x 42.8 x 20.5 cm)
Weight	50.04 lb. (22.7 kg)
Degree of protection	NEMA 4X
Night-time consumption	< 1 W
Inverter topology	Transformerless
Cooling	Forced-air ventilation
Installation	Indoor and outdoor installation
Permissible ambient temperature	-40 F to 131 F (-40 C to 55 C)
Permissible storage temperature	-40 F to 158 F (-40 C to 70 C)
Permitted humidity	0 to 100 %
DC connection terminals	6 x DC+ and 6 x DC- screw terminals for copper (solid / stranded / fine stranded) or aluminum
AC connection terminals	Screw terminals 12-6 AWG
Certificates and compliance with standards	UL 1741-2010, IEEE 1547-2003, IEEE 1547.1, UL 1699B-2013, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC Article 690, C22. 2 No. 107.1-01 (Sept. 2011) California Solar Initiative - Program Handbook - Appendix C: Inverter Integral 5% Meter Performance Specification

PROTECTIVE DEVICES	STANDARD WITH ALL PRIMO MODELS
Insulated monitoring	Integrated
Stand alone operation protection	Integrated
Reverse polarity protection	Integrated
Arc detector / interrupter	Integrated
Over temperature	Operating point offset / active cooling

INTERFACES	STANDARD WITH ALL PRIMO MODELS
Wireless/Ethernet/Serial	Fronius Solar.web / Fronius Solar.web, SunSpec Modbus TCP, JSON / SunSpec Modbus RTU
6 inputs or 4 digital inputs/outputs	External relay controls
USB (A socket)	For USB sticks
2 x RS422 (RJ45 socket)	Fronius Solar Net, interface protocol
Datalogger and Webserver	Included

## TECHNICAL DATA

INPUT DATA		PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1
MPP voltage range		200 - 800 V	240 - 800 V	240 - 800 V	250 - 800 V	270 - 800 V
Residential operating voltage range		150 V - 600 V				
Residential max. input voltage		600 V				
Commercial operating voltage range		150 V - 1,000 V				
Commercial max. input voltage		1,000 V				
Nominal input voltage		650 V	650 V	660 V	660 V	660 V
Nominal input current		6.2 A	8.1 A	9.7 A	12.3 A	13.3 A (12.6 A at 208 V)
Max. input current		12.0 A	12.0 A	18.0 A	18.0 A	18.0 A
Max. short circuit current of solar modules		15.0 A	15.0 A	22.5 A	22.5 A	22.5 A
Number of MPPT		2				

  

OUTPUT DATA		PRIMO 3.8-1	PRIMO 5.0-1	PRIMO 6.0-1	PRIMO 7.6-1	PRIMO 8.2-1
Nominal output power	208 V	3,800 W	5,000 W	6,000 W	7,600 W	7,800 W
	240 V	3,800 W	5,000 W	6,000 W	7,600 W	8,200 W
Max. efficiency		97.7%				
CEC efficiency		95.5%	96%	96.5%	96.5%	96.5%
Admissible conductor size AC		AWG 10 - AWG 6				
Grid connection		208 V / 240 V				
Operating AC voltage range	208 V	183 - 229 V				
	240 V	211 - 264 V				
Nominal output current	208 V	18.3 A	24.0 A	28.8 A	36.5 A	37.5 A
	240 V	15.8 A	20.8 A	25.0 A	31.7 A	34.2 A
Number of phases		1				
Output frequency		60 Hz				

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/ Perfect Welding / Solar Energy / Perfect Charging

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/ Whether welding technology, photovoltaics or battery charging technology - our goal is clearly defined: to be the innovation leader. With around 3,000 employees worldwide, we shift the limits of what's possible - our more than 850 active patents are testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy. Further information about all Fronius products and our global sales partners can be found at [www.fronius.com](http://www.fronius.com).



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