



# FRONIUS IG PLUS V

/ The inverter series for advanced PV systems



/ MIX Technology



/ Smart Transformer Switching



/ Quick Service Technology



/ Smart Grid Ready



/ Wi-Fi@\* Interface



/ The Fronius IG Plus V inverter builds on a successful model with multiple enhancements from the Fronius IG series including maximum power harvest, a built-in six circuit string combiner, integrated, lockable DC disconnect, significantly improved efficiency, and unbeatable reliability. New, larger power stages expand the proven Fronius IG family from 2 to 12 kW in a single inverter.

## TECHNICAL DATA: FRONIUS IG PLUS V

INPUT DATA	3.0-1 <sub>UNI</sub>	3.8-1 <sub>UNI</sub>	5.0-1 <sub>UNI</sub>	6.0-1 <sub>UNI</sub>	7.5-1 <sub>UNI</sub>	10.0-1 <sub>UNI</sub>	10.0-3 <sub>DELTA</sub>	11.4-1 <sub>UNI</sub>	11.4-3 <sub>DELTA</sub>	12.0-3 <sub>WYE277</sub>
Recommended PV-Power (kWp)	2.50 - 3.45	3.20 - 4.40	4.25 - 5.75	5.10 - 6.90	6.35 - 8.60	8.50 - 11.50	8.50 - 11.50	9.70 - 13.10	9.70 - 13.10	10.20 - 13.80
Nominal Input Current	8.3 A	10.5 A	13.8 A	16.5 A	20.7 A	27.6 A	27.6 A	31.4 A	31.4 A	33.1 A
Max. Usable Input Current	14.0 A	17.8 A	23.4 A	28.1 A	35.1 A	46.7 A	46.7 A	53.3 A	53.3 A	56.1 A
MPPT - Voltage Range	230 - 500 V									
DC Startup	260 V									
Max. Input Voltage	600 V									
Admissible Conductor Size (DC)	No. 14 to 6 AWG. For larger wire, use Fronius connecting distributor.									
Max. Current per DC Input Terminal	20 Amps. For higher input current, use Fronius connecting distributor.									

OUTPUT DATA	3.0-1 <sub>UNI</sub>	3.8-1 <sub>UNI</sub>	5.0-1 <sub>UNI</sub>	6.0-1 <sub>UNI</sub>	7.5-1 <sub>UNI</sub>	10.0-1 <sub>UNI</sub>	10.0-3 <sub>DELTA</sub>	11.4-1 <sub>UNI</sub>	11.4-3 <sub>DELTA</sub>	12.0-3 <sub>WYE277</sub>
Nominal Output Power	3,000 W	3,800 W	5,000 W	6,000 W	7,500 W	9,995 W	9,995 W	11,400 W	11,400 W	12,000 W
Max. Continuous Output Power	3,000 W	3,800 W	5,000 W	6,000 W	7,500 W	9,995 W	9,995 W	11,400 W	11,400 W	12,000 W
AC Output Voltage	208/240/277						208/240	208/240/277	208/240	480/277 WYE
Number of Phases	1						3	1	3	
Admissible Conductor Size (AC)	No. 14 - 4 AWG									
Max. Continuous Utility Backfeed Current	0A									
Nominal Output Frequency	60 Hz									
Operating Frequency Range	59.3 - 60.5 Hz									
Total Harmonic Distortion	< 3 %									
Power Factor	0.85 - 1 ind. / cap.									
Operating AC Voltage Range	208 V					183 - 229 V (-12 / +10 %)				
	240 V					183 - 229 V (-12 / +10 %)				
	277 V					244 - 305 V (-12 / +10%)				
Max. Continuous Output Current	208 V	14.4 A	18.3 A	24.0 A	28.8 A	36.1 A	48.1 A	27.7 A*	54.8 A	31.6 A*
	240 V	12.5 A	15.8 A	20.8 A	25.0 A	31.3 A	41.7 A	24.0 A*	47.5 A	27.4 A*
	277 V	10.8 A	13.7 A	18.1 A	21.7 A	27.1 A	36.1 A	n.a.	41.2 A	n.a.

\*Pre phase

\*The term Wi-Fi@ is a registered trademark of the Wi-Fi Alliance.

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GENERAL DATA	3.0-1 <sub>UNI</sub>	3.8-1 <sub>UNI</sub>	5.0-1 <sub>UNI</sub>	6.0-1 <sub>UNI</sub>	7.5-1 <sub>UNI</sub>	10.0-1 <sub>UNI</sub>	10.0-3 <sub>DELTA</sub>	11.4-1 <sub>UNI</sub>	11.4-3 <sub>DELTA</sub>	12.0-3 <sub>WYE277</sub>
Max. Efficiency	96.2%									
Unit Dimensions (W x H x D)	17.1 x 24.8 x 9.6 in.		17.1 x 36.4 x 9.6 in.			17.1 x 48.1 x 9.6 in.				
CEC Efficiency	208 V	95.0 %	95.0 %	95.5 %	95.5 %	95.0 %	95.0 %	95.5 %	95.0 %	n.a.
	240 V	95.5 %	95.5 %	95.5 %	96.0 %	95.5 %	95.5 %	95.5 %	96.0 %	n.a.
	277 V	95.5 %	95.5 %	96.0 %	96.0 %	96.0 %	n.a.	96.0 %	n.a.	96.0 %
Consumption in Standby (Night)	< 1.5 W									
Consumption During Operation	8 W		15 W			20 W				
Cooling	Controlled forced ventilation, variable speed fan									
Enclosure Type	NEMA 3R									
Power Stack Weight	31 lbs. (14 kg)		57 lbs. (26 kg)			84 lbs. (38 kg)				
Wiring Compartment Weight	24 lbs. (11 kg)			26 lbs. (12 kg)						
Admissible Ambient Operating Temperature	-13° F...+131° F (-13° C...+55° C)									
Advanced Grid Features	Active and reactive power control, low voltage ride-through									
Compliance	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 EQUIPMENT	3.0-1 <sub>UNI</sub>	3.8-1 <sub>UNI</sub>	5.0-1 <sub>UNI</sub>	6.0-1 <sub>UNI</sub>	7.5-1 <sub>UNI</sub>	10.0-1 <sub>UNI</sub>	10.0-3 <sub>DELTA</sub>	11.4-1 <sub>UNI</sub>	11.4-3 <sub>DELTA</sub>	12.0-3 <sub>WYE277</sub>
Ground Fault Protection	Internal GFDI (Ground Fault Detector/Interrupter) in accordance with UL 1741-2010 and NEC Art. 690									
DC Reverse Polarity Protection	Internal Diode									
Islanding Protection	Internal; in accordance with UL 1741-2010, IEEE 1547-2003 and NEC									
Over Temperature Protection	Output power derating / active cooling									

/ Perfect Welding / Solar Energy / Perfect Charging

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