

Maximum energy harvest –
cloudy or clear



Fronius **IG Plus** PV Inverter

The first complete solution. Reliable. Proven. Smart.

An outstanding addition to the family: The next generation Fronius IG Plus inverter builds on a successful model with multiple enhancements, 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.



POWERING YOUR FUTURE

INPUT DATA	Fronius IG Plus V	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	11.4-1 _{UNI}	10.0-3 _{Delta}	11.4-3 _{Delta}	12.0-3 _{WYE277}
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	9.70 - 13.10	8.50 - 11.50	9.70 - 13.10	10.20 - 13.80
MPPT-voltage range		230 ... 500 V									
DC startup voltage		245 V									
Max. input voltage (at 1000 W/m ² 14°F (-10°C) in open circuit operation)		600 V									
Nominal input current		8.3 A	10.5 A	13.8 A	16.6 A	20.7 A	27.6 A	31.4 A	27.6 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	53.3 A	46.7 A	53.3 A	56.1 A
Admissible conductor size (DC)		No. 14 - 6 AWG									
Number of DC input terminals		6									
Max. current per DC input terminal		20 A; Bus bar available for higher input currents									

OUTPUT DATA	Fronius IG Plus V	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	11.4-1 _{UNI}	10.0-3 _{Delta}	11.4-3 _{Delta}	12.0-3 _{WYE277}	
Nominal output power (P _{AC nom})		3000 W	3800 W	5000 W	6000 W	7500 W	9995 W	11400 W	9995 W	11400 W	12000 W	
Max. continuous output power 104°F (40°C) 208 V / 240 V / 277 V		3000 W	3800 W	5000 W	6000 W	7500 W	9995 W	11400 W	9995 W	11400 W	12000 W	
Nominal AC output voltage		208 V / 240 V / 277 V						208 V / 240 V		277 V		
Operating AC voltage range (default)	208 V 240 V 277 V	183 - 229 V (-12 / +10 %) 211 - 264 V (-12 / +10 %) 244 - 305 V (-12 / +10 %)										
Max. continuous output current	208 V 240 V 277 V	14.4 A 12.5 A 10.8 A	18.3 A 15.8 A 13.7 A	24.0 A 20.8 A 18.1 A	28.8 A 25.0 A 21.7 A	36.1 A 31.3 A 27.1 A	48.1 A 41.7 A 36.1 A	54.8 A 47.5 A 41.2 A	27.7 A* 24.0 A* n.a.	31.6 A* 27.4 A* n.a.	n.a. n.a. 14.4 A*	
Number of phases		1						3				
Admissible conductor size (AC)		No. 14 - 4 AWG										
Max. continuous utility back feed current		0 A										
Nominal output frequency		60 Hz										
Operating frequency range		59.3 - 60.5 Hz										
Total harmonic distortion		< 3 %										
Power factor		1										

GENERAL DATA	Fronius IG Plus V	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	11.4-1 _{UNI}	10.0-3 _{Delta}	11.4-3 _{Delta}	12.0-3 _{WYE277}
Max. efficiency		96.2 %									
CEC efficiency	208 V 240 V 277 V	95.0 % 95.5 % 96.0 %	95.0 % 95.5 % 96.0 %	95.5 % 95.5 % 96.0 %	95.5 % 96.0 % 96.0 %	95.0 % 95.5 % 96.0 %	95.0 % 95.5 % 96.0 %	95.0 % 95.5 % 96.0 %	95.0 % ** 96.0 % ** n.a.	95.0 % 96.0 % n.a.	n.a. n.a. 96.0 %
Consumption in standby (night)		< 1.5 W									
Consumption during operation		8 W		14 W			20 W				
Cooling		Controlled forced ventilation, variable fan speed									
Enclosure type		NEMA 3R									
Unit dimensions (W x H x D)		17.1 x 26.5 x 9.9 in.		17.1 x 38.1 x 9.9 in.			17.1 x 49.7 x 9.9 in.				
Power stack weight		31 lbs. (14 kg)		57 lbs. (26 kg)			84 lbs. (38 kg)				
Wiring compartment weight		24 lbs. (11 kg)		24 lbs. (11 kg)			26 lbs. (12 kg)				
Admissible ambient operating temperature		-13°F ... +131°F (-25°C ... + 55°C)									
Compliance		UL 1741-2010, IEEE 1547-2003, IEEE 1547.1, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC Article 690, C22. 2 No. 107.1-01 (Sept. 2001), California Solar Initiative - Program Handbook - Appendix C: Inverter Integral 5 % Meter Performance Specification									

PROTECTION DEVICES	Fronius IG Plus V	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	11.4-1 _{UNI}	10.0-3 _{Delta}	11.4-3 _{Delta}	12.0-3 _{WYE277}
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		Output power derating / active cooling									

* per Phase
** preliminary



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