



SHIFTING THE LIMITS

FRONIUS IG PLUS ADVANCED WITH INTEGRATED AFCI



/ MIX Technology



/ Smart Transformer Switching



/ Arc Fault Circuit Interruption



/ Quick Service Technology



/ Smart Grid Ready



/ Wi-Fi®* Interface



/ The Fronius IG Plus Advanced was the first complete inverter lineup of NEC 2011 compliant, AFCI protected, inverters in the United States and continues to be the leader in quality inverter technology. Power classes ranging from 3 to 12 kW in both single and true 3 phase applications with integrated Fronius MIX Technology and wide voltage windows are the perfect match for your system design.

TECHNICAL DATA: FRONIUS IG PLUS ADVANCED

INPUT DATA	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	10.0-3 _{DELTA}	11.4-1 _{UNI}	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	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 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	10.0-3 _{DELTA}	11.4-1 _{UNI}	11.4-3 _{DELTA}	12.0-3 _{WYE277}	
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	211 - 269 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*	n.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*	n.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.	14.4 A*

*Pre phase

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

TECHNICAL DATA: FRONIUS IG PLUS ADVANCED

GENERAL DATA	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	10.0-3 _{DELTA}	11.4-1 _{UNI}	11.4-3 _{DELTA}	12.0-3 _{WYE277}	
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 %	95.5 %	95.0 %	n.a.
	240 V	95.5 %	95.5 %	95.5 %	96.0 %	95.5 %	95.5 %	95.5 %	96.0 %	96.0 %	n.a.
	277 V	95.5 %	95.5 %	96.0 %	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	-40°F...+131°F (-40°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 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}	10.0-1 _{UNI}	10.0-3 _{DELTA}	11.4-1 _{UNI}	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 Protection	Output power derating / active cooling									
Arc-Fault Circuit Protection	Internal AFCI (Arc-Fault Circuit Interrupter); in accordance with UL 1699 Outline of Investigation for Photovoltaic (PV) DC Arc-Fault Circuit Protection (Issue Number 2, January 14, 2013)									

/ Perfect Welding / Solar Energy / Perfect Charging

WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS OF POSSIBILITY.

/ 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 and representatives can be found at www.fronius.com

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