



SHIFTING THE LIMITS

FRONIUS IG PLUS ADVANCED INVERTER WITH INTEGRATED AFCI



/ MIX™ Technology



/ Smart Transformer Switching



/ WLAN



/ Quick Service Technology



/ Smart Grid Ready

/ The Fronius IG Plus Advanced is the first complete inverter lineup of the NEC 2011 compliant AFCI protected inverters in the United States. 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 (3.0-1_{UNI}, 3.8-1_{UNI}, 5.0-1_{UNI}, 6.0-1_{UNI}, 7.5-1_{UNI})

INPUT DATA	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}
Recommended PV-Power (kWp)	2.50 - 3.45	3.20 - 4.40	4.25 - 5.75	5.10 - 6.90	6.35 - 8.60
Nominal Input Current	8.3 A	10.5 A	13.8 A	16.5 A	20.7 A
Max. Usable Input Current	14.0 A	17.8 A	23.4 A	28.1 A	35.1 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}
Nominal Output Power	3,000 W	3,800 W	5,000 W	6,000 W	7,500 W
Max. Continuous Output Power	3,000 W	3,800 W	5,000 W	6,000 W	7,500 W
AC Output Voltage	208 / 240 / 277				
Number of Phases	1			1	
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.				
GENERAL DATA	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}
Max. Efficiency	96.2				96.2
Unit Dimensions (W x H x D)	17.1 x 26.5 x 9.9 in.	17.1 x 26.5 x 9.9 in.	17.1 x 38.1 x 9.9 in.	17.1 x 38.1 x 9.9 in.	17.1 x 38.1 x 9.9 in.
CEC Efficiency	208 V	95.0 %	95.0 %	95.5 %	95.0 %
	240 V	95.5 %	95.5 %	95.5 %	95.5 %
	277 V	96.0 %	96.0 %	96.0 %	96.0 %
Consumption in Standby (Night)	< 1.5 W				
Consumption During Operation	8 W	8 W	14 W	14 W	14 W
Cooling	Controlled forced ventilation, variable speed fan				
Enclosure Type	NEMA 3R				
Power Stack Weight	31 lbs. (14 kg)	31 lbs. (14 kg)	57 lbs. (26 kg)	57 lbs. (26 kg)	57 lbs. (26 kg)
Wiring Compartment Weight	24 lbs. (11 kg)				
Admissible Ambient Operating Temperature	-13° F...+131° F (-25° 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				

TECHNICAL DATA: FRONIUS IG PLUS ADVANCED (3.0-1_{UNI}, 3.8-1_{UNI}, 5.0-1_{UNI}, 6.0-1_{UNI}, 7.5-1_{UNI})

EFFICIENCY		3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}
Operating AC Voltage Range	208 V			183 - 229 V (-12 / +10%)		
	240 V			211 - 264 V (-12 / +10%)		
	277 V			244 - 305 V (-12 / +10%)		
Max. Continuous Output Current	208 V	14.4 A	18.3 A	24.0A	28.8 A	36.1 A
	240 V	12.5 A	15.8 A	20.8 A	25.0 A	31.3 A
	277 V	10.8 A	13.7 A	18.1 A	21.7 A	27.1 A

PROTECTIVE EQUIPMENT	3.0-1 _{UNI}	3.8-1 _{UNI}	5.0-1 _{UNI}	6.0-1 _{UNI}	7.5-1 _{UNI}
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)				

TECHNICAL DATA: FRONIUS IG PLUS ADVANCED(10.0-1_{UNI}, 11.4-1_{UNI}, 10.0-3_{UNI} DELTA, 11.4-3_{UNI} DELTA, 12.0-3 WYE277)

INPUT DATA	10.0 - 1 _{UNI}	11.4 - 1 _{UNI}	10.0 - 3 _{UNI} DELTA	11.4 - 3 _{UNI} DELTA	12.0 - 3 WYE277
Recommended PV-Power (kWp)	5.50 - 11.50	9.70 - 13.10	8.50 - 11.50	9.70 - 13.10	10.20 - 13.80
Nominal Input Current	27.6 A	31.4 A	27.6 A	31.4 A	33.1 A
Max. Usable Input Current	46.7 A	53.3 A	46.7 A	53.3 A	56.1 A
MPPPT - 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	10.0 - 1 _{UNI}	11.4 - 1 _{UNI}	10.0 - 3 _{UNI} DELTA	11.4 - 3 _{UNI} DELTA	12.0 - 3 WYE277
Nominal Output Power	9,995 W	11,400 W	9,995 W	11,400 W	12,000 W
Max. Continuous Output Power	9,995 W	11,400 W	9,995 W	11,400 W	12,000 W
AC Output Voltage	208 / 240 / 277	208 / 240 / 277	208 / 240	208 / 240	480 / 277 WYE
Number of Phases	1	1	3	3	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.				
GENERAL DATA	10.0 - 1 _{UNI}	11.4 - 1 _{UNI}	10.0 - 3 _{UNI} DELTA	11.4 - 3 _{UNI} DELTA	12.0 - 3 WYE277
Max. Efficiency	96.2				
Unit Dimension (W x H x D)	17.1 x 49.7 x 9.9 in.				
CEC Efficiency	208 V	95.0 %	95.0 %	95.5 %	95.0 %
	240 V	95.5 %	95.5 %	95.5 %	96.0 %
	277 V	96.0 %	96.0 %	n.a.	96.0 %
Consumption in Standby (Night)	< 1.5 W				
Consumption During Operation	20 W				
Cooling	Controlled forced ventilation, variable speed fan				
Enclosure Type	NEMA 3R				
Power Stack Weight	84 lbs. (38 kg)				
Wiring Compartment Weight	26 lbs. (12 kg)				
Admissible Ambient Operating Temperature	-13° F...+131° F (-25° 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				

TECHNICAL DATA: FRONIUS IG PLUS ADVANCED(10.0-1_{UNI}, 11.4-1_{UNI}, 10.0-3_{UNI} DELTA, 11.4-3_{UNI} DELTA, 12.0-3 WYE277)

EFFICIENCY		10.0 - 1 _{UNI}	11.4 - 1 _{UNI}	10.0 - 3 _{UNI} DELTA	11.4 - 3 _{UNI} DELTA	12.0 - 3 WYE277
Operating AC Voltage Range	208 V			183 - 229 V (-12 / +10 %)		
	240 V			211 - 264 V (-12 / +10%)		
	277 V			244 - 305 V (-12 / +10%)		
Max. Continuous Output Current	208 V	48.1 A	54.8 A	27.7 A*	31.6 A*	n.a.
	240 V	41.7 A	47.5 A	24.0 A*	27.4 A*	n.a.
	277 V	36.1 A	41.2 A	n.a.	n.a.	14.4 A*

PROTECTIVE EQUIPMENT	10.0 - 1 _{UNI}	11.4 - 1 _{UNI}	10.0 - 3 _{UNI} DELTA	11.4 - 3 _{UNI} 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)				

/ Battery Charging Systems / Welding Technology / Solar Electronics

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

/ Whether Battery Charging Systems, Welding Technology or Solar Electronics - our goal is clearly defined: to be the technology and quality leader. With more than 3,000 employees worldwide, we shift the limits of what's possible - our 737 active patents are testimony to this. While others progress step by step, we innovate in leaps and bounds. Further information about all Fronius products and our global sales partners and representatives can be found at www.fronius.com



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