

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.



| 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 | 16.5 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 41.6 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 (at nominal output power) | | | | | | | | | | |

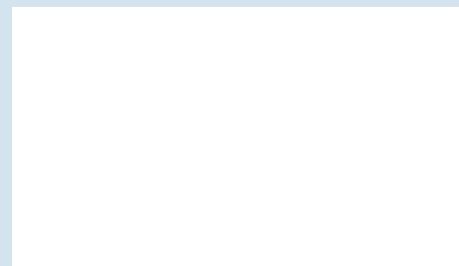
| GENERAL DATA | Fronius IG Plus V | 3.0-1 _{UNI} | 3.8-1 _{UNI} | 5.0-1 _{UNI} | 6.0-1 _{UNI} | 7.5-1 _{UNI} | 10.0-1 _{UNI} | 11.4-1 _{UNI} | 10.0-3 _{Delta} | 11.4-3 _{Delta} | 12.0-3 _{WYE277} | |
|------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|--------------------------------|--------------------------|--------------------------|--|
| 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 speed fan | | | | | | | | | | |
| 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



Fronius USA, LLC
10421 Citation Drive, Suite 1100
Brighton, MI 48116
E-Mail: pv-us@fronius.com
www.fronius-usa.com



Text and illustrations are technically correct at the time of going to print. The right to make modifications is reserved. This document may not be copied or reproduced in any form, not even in part, without prior written consent of Fronius International GmbH. 40.0006;2981;AE v02 2011 es09