




Fronius **IG Plus**

The next generation
grid-connected PV inverter.



POWERING YOUR FUTURE



Maximum earnings.
In any weather.

The first multi-purpose device.
Reliability and maximum earnings security.

A strong addition to the family: The next generation Fronius IG Plus inverter is an enhancement to a successful concept. For maximum earnings security, versatility and the highest reliability. New power classes expand the proven Fronius IG family (from 4 to 12 kW). And numerous advantages provide consistently high earnings.

Maximum Earnings Security



Highest Reliability



First All-Round Device



Fronius IG Plus 50

Strong and compact. Best suited for systems up to 4 kW. The one phase device for efficient photovoltaic systems, e.g. for family homes.



Fronius IG Plus 100

The two phase 8 kW device for large systems. Also available in a one phase version.



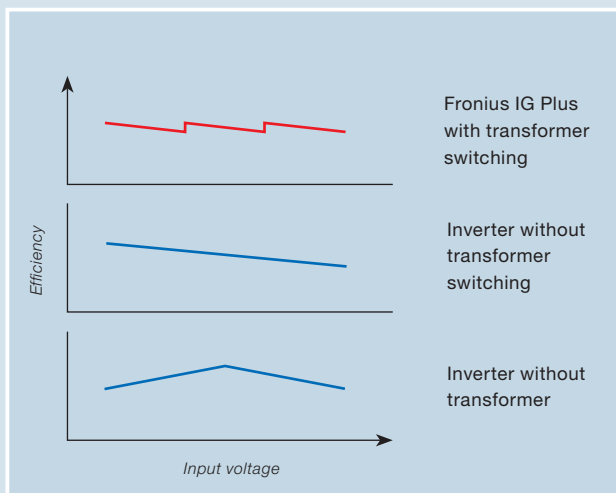
Fronius IG Plus 150

Maximum strength. Three phases in a 12 kW device for mega-systems. The only wall unit on the market in this power class.

Maximum Earnings Security

Get maximum use out of every ray of light. This is achieved through a complex interaction of different factors:

3 efficiency peaks. More earnings for every system size: The automatic transformer switching function of the Fronius IG Plus makes sure of this. This enables not one, but three equal efficiency peaks. The result: Constant efficiency over a wide input voltage range. In comparison: The efficiency of inverters without transformer switching declines steadily with an increasing input voltage. Devices without a transformer only have one efficiency peak.



MIX™ concept. You get the maximum out of partial load ranges, e.g. on cloudy days, through a clever combination of several power modules. The power modules in Fronius devices divide up the work depending on the operating hours.

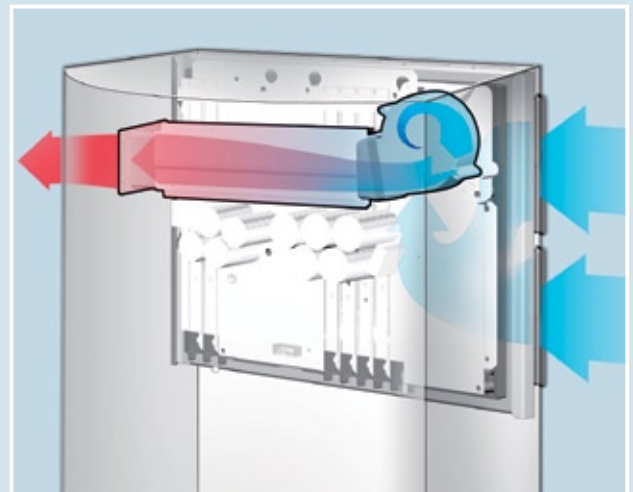
Module Manager™. Whoever can always remain at the maximum power point (MPP), can get the most out of each ray of light. This is the job of the Module Manager™: For fast, exact MPP tracking. This is especially important for thin-layer modules whose efficiency characteristics are more even.

Market leader. With a 96.1% maximum efficiency, the Fronius IG Plus series scores the highest grade among HF devices.

Highest Reliability

The Fronius development team has put a lot of work into ensuring failures don't occur. Because the smallest details can have the greatest repercussions.

Well thought out ventilation concept. Disruptive ambient factors such as dust or moisture remain on the outside. The reason: Cooling air is drawn in on the wall side and routed through a closed channel over the heat sink. This prevents contact with the circuit board. At the same time, the components are kept cool – the device operates with a stable consistency.



Failsafe. You can rely on Fronius inverters. And should a power module happen to fail, the others take up the slack. As soon as a spare part is delivered, it can be quickly and easily replaced by a service technician. You don't have to dismantle the entire unit: The connector including all cabling and configurations remains on the wall.

High durability. The MIX™ concept increases the lifespan of the inverter. Several smaller power modules divide up the operating hours. The new ventilation concept also has a lot to do with this because cleaner power modules work longer. And of course, only the highest quality components are used for this new generation of inverters.

The first all-round device

Versatility as a basic principle: The Fronius IG Plus works well with all PV modules and is suitable for all system sizes.

Compatible with nearly all module configurations.

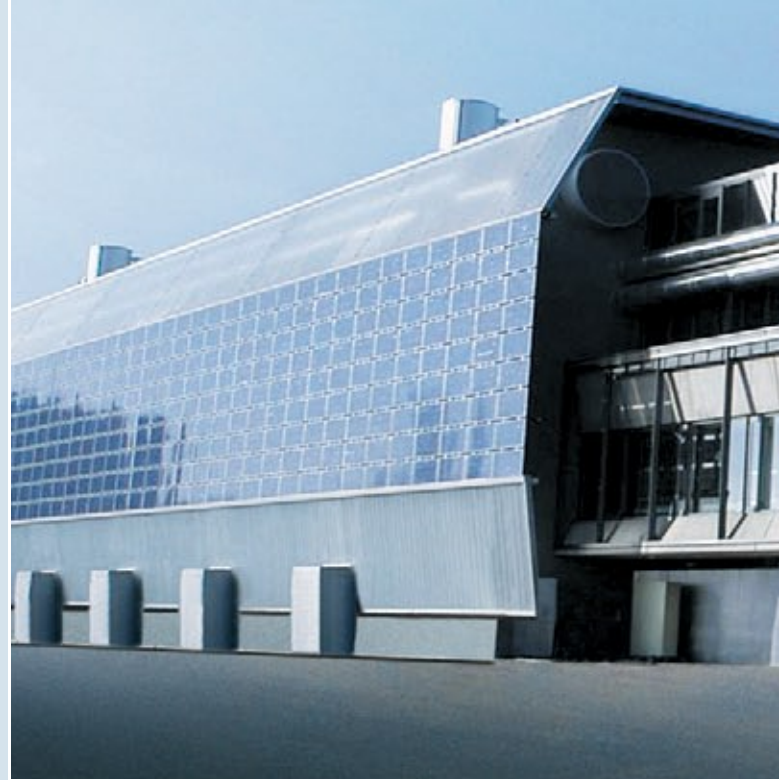
The Fronius IG Plus works optimally with all module types. The Fronius IG Plus is especially well-suited for thin-layer modules because of its wide input voltage range, galvanic isolation, standard grounding option as well as its precise MPP tracking feature.

Grounding on site. You decide on site, whether or not you want or need to ground the modules. Insert fuse, activate the software – grounding is complete.

For inside and out. All Fronius IG Plus devices have a robust, well-designed metal housing. UV-resistance and corrosion-protection enable them to be used both inside and out.

No unauthorized negative phase sequence currents. Due to the separation of the power modules in the MIX™ concept, there is never a negative phase sequence current outside the permitted range.

Universal product design. The functional principle is identical in the entire Fronius IG family. This means that if you are familiar with one device, you can also operate and service all other devices.



Integrated DC disconnect. No additional installation or cabling is necessary. The highest comfort and safety as per DIN-VDE 0100-712.

The new power plug system. The connection area and power modules are installed separately from each other. Very easy, very safe: The connection area is attached to the wall as normal. Then the power module is simply plugged in. The power plug connects both parts into one secure unit. When service is required, the connector remains on the wall – all settings and configurations remain untouched.



Fronius IG Plus Overview

Naturally, all Fronius IG Plus devices have the **CE** mark and meet all required guidelines and standards. For more information about certificates as well as details about equipment analysis and control using the DatCom system, please go to www.fronius.com.

INPUT DATA	Fronius IG Plus 50	Fronius IG Plus 100	Fronius IG Plus 150
DC nominal capacity	4210 W	8420 W	12630 W
MPP voltage range	230 - 500 V	230 - 500 V	230 - 500 V
Max. input voltage (for 1000 W/m ² , -10°C)	600 V	600 V	600 V
Max. input	18.31 A	36.61 A	54.92 A
OUTPUT DATA			
AC nominal capacity	4000 W	8000 W	12000 W
Max. output	4000 W	8000 W	12000 W
Max. efficiency	96.1 %	96.1 %	96.1 %
Euro. efficiency	95.1 %	95.5 %	95.5 %
MPP adaptation efficiency	99.99 %	99.99 %	99.99 %
Main voltage / Frequency	230 V / 50 Hz (60 Hz)		
Power connection	1-phase	2-phase / 1-phase (optional)	3-phase
Harmonic distortion	< 3.5 %	< 3.5 %	< 3.5 %
Power factor	1	1	1
Power consumption at night	0 W	0 W	0 W
GENERAL DATA			
Measurements (height x width x depth)	628.5 x 433.2 x 242.9 mm	923.5 x 433.2 x 242.9 mm	1218.5 x 433.2 x 242.9 mm
Weight	25 kg	38 kg	49 kg
Protection class	IP 45	IP 45	IP 45
Cooling	Regulated cooling		
Housing	Metal housing for inside and outside installation		
Ambient temperature range	From -20°C to +50°C		
Permitted humidity	0% to 95%		
SAFETY EQUIPMENT			
DC insulation measurement	Warning at R _{ISO} < 500k Ohm		
Overload behavior	Operating point shift, power limiter		
DC circuit breaker	integrated		

The right to make technical modifications is reserved.



FRONIUS INTERNATIONAL GMBH
 4600 Wels-Thalheim, Günter-Fronius-Straße 1
 Austria
 E-mail: PV@fronius.com
www.fronius.com