

/ Perfect Welding / Solar Energy / Perfect Charging



**DECADES OF MAXIMUM SYSTEM
PERFORMANCE ARE POSSIBLE.
NOW THAT WE ARE SIMPLIFYING
REPOWERING.**

/ Repowering inverters for PV systems
into the megawatt range.

REPOWERING: INCREASE THE PERFORMANCE OF YOUR SYSTEM

/ Hundreds of thousands of PV systems worldwide are generating clean solar power. Many of these systems are now showing their age and can be upgraded using new devices. Not only do Fronius inverters use state-of-the-art technology, they also impress with their higher levels of efficiency. And thanks to their innovative design, Fronius inverters can also replace devices from other manufacturers without requiring the additional time and effort required for installation.

STATE-OF-THE-ART TECHNOLOGY

/ Fronius inverters use state-of-the-art technology. The data communication package includes data logging, WLAN, Ethernet, energy management, a web server and numerous interfaces. In addition, they are ideally equipped to meet the technical requirements of the future and use intelligent algorithms to maximise the yield.

MAXIMUM EFFICIENCY

/ Modern Fronius inverters can reach over 98% efficiency. Investing in a new inverter quickly pays off, particularly with high feed-in tariffs. Repowering maximises the profit of the PV system.

INCREASED RELIABILITY

/ Intensive research and development, strict quality controls and the selection of the highest quality components make Fronius inverters the most reliable on the market. The devices are manufactured in Austria by expertly trained personnel using cutting-edge machinery.

FUTURE-PROOF WITH PLUG-IN CARDS

/The innovative plug-in card technology allows flexible retrofitting of future functions making the Fronius inverters fit for the future.

COMPATIBLE WITH THIRD-PARTY COMPONENTS

/ Fronius inverters make use of various open interfaces, such as Modbus. This means that even if third-party components are being used for system monitoring, Fronius inverters can be integrated easily into the existing data communications network.

LONG-TERM SAFETY

/ It is not just Fronius inverters that are oriented towards maintaining efficiency over the decades. As a family-run company with three separate divisions, we have been testing technologies to convert electrical energy for 70 years. In contrast to listed companies, we do not focus on short-term profit maximisation, but think and act over the long term.

FRONIUS INVERTERS: THE PERFECT DEVICE FOR EVERY APPLICATION

/ Fronius inverters are suitable for universal application in all PV systems. From small self-consumption systems for a family home to megawatt installations in the industrial sector. With our transformer inverters, we are one of the few manufacturers on the market that can also easily retrofit systems with thin film solar modules.



/ FRONIUS SYMO
3.0 – 20.0 kW
Maximum flexibility.
Comprehensive data
communication built-in.



Simple installation when
repowering systems with thin
film solar modules.

/ FRONIUS IG PLUS
2.6 – 12.0 kW
Compatible with all
module technologies
(including thin film).



/ FRONIUS ECO
25.0 and 27.0 kW
Compact project inverter for
unrestricted indoor and
outdoor use.



Simple installation when repowering systems with thin film solar modules.

/ FRONIUS GALVO

1.5 – 3.1 kW

Compatible with all module technologies.



/ FRONIUS SYMPO HYBRID

3.0 – 5.0 kW

A battery can be added at any time to store the PV electricity it has generated.



/ FRONIUS PRIMO

3.0 – 8.2 kW

Maximum flexibility.
Comprehensive data communication built-in.

SIMPLE REPOWERING WITH FRONIUS

/ Suitable for a small rooftop installation on a single-family home or an industrial installation. Fronius inverters can be employed flexibly to replace old devices, including ones from other manufacturers. Besides improving the system performance, the system is also upgraded with the latest technology.

SINGLE-FAMILY HOME IN ILLMENSEE, GERMANY

/ From old to new: modernisation of existing installation

The photovoltaic system has been in use at a single-family home since 1993. *“The PV system had been operating for 20 years. It was now time to bring it up to date and this could only be done with the Fronius Galvo. The Fronius Galvo can be used anywhere, thanks to its large voltage window,”* explains Fronius Service Partner Plus Jörg Pfeleiderer. The inverter – made by another manufacturer – was replaced by a Fronius Galvo in May 2013. The system now generates 1,250 kWh a year.



INDUSTRIAL PREMISES IN VILLANOVA DI CAMPOSAMPIERO, ITALY

/ Fronius Symo – the ideal repowering inverter

Since July 2014, 18 Fronius Symo 10.0-3-M have been generating clean solar power on the roof of a business enterprise in northern Italy. Before repowering, the PV system had been using inverters made by another manufacturer, but these had not been working properly since their installation in November 2011. The decision to modernise the system by switching to the new Fronius Symo was easy for the installer. *“The combination of flexible system design, compact size and the IP66 protection class persuaded me,”* explains Alessio Marin, the installer.



HOW DOES REPOWERING BENEFIT YOU?

/ Fronius has the ideal inverter for every application. Since our comprehensive product portfolio allows us to replace almost any old inverter without the need for extensive cabling, your system is back up and running in no time. The downtimes are as short as possible. The new devices also increase the annual yield of the PV system and upon registration, they have a minimum five year warranty.

/ Repowering works for old Fronius devices, for which the warranty has expired, as well as for inverters from other manufacturers.

EXAMPLE 1: 10 KWP SYSTEM		ANNUAL INCREASE IN YIELD
Previous inverter	Fronius IG 60	
Repowering inverter	Fronius Symo 10.0-3	Approx. 470 kWh/ year

EXAMPLE 2: 4.6 KWP SYSTEM		ANNUAL INCREASE IN YIELD
Previous inverter	Inverter from another manufacturer	
Repowering inverter	Fronius Primo 4.6-1	Approx. 180 kWh/ year

Please note that these calculations are based on simulations. The increase in yield from your PV system may differ from these values. Each PV system must be carefully checked prior to repowering to determine whether replacement is legally and technically possible.

**SHORT
DOWN-
TIMES**

**INCREASES
IN YIELD**

**MINIMUM
5-YEAR
WARRANTY**

YESTERDAY, TODAY AND TOMORROW: THE SECURITY OF A STRONG BRAND

/ Fronius is a family-owned company that has been exploring new technologies to convert electrical energy for 70 years. By its own efforts, with a great sense of family and without having to depend on external funding, Fronius has over the years built up an impressive pool of knowledge and know-how. Continuous progress and technical innovations are the result of patient research work, diligence and personal commitment.

/ Quality is top priority for Fronius. Strict quality control processes ensure maximum yields and a long service life from your PV system. Once registered, Fronius provides a guarantee of at least 5 years on every inverter. This can be extended up to 20 years.

/ Owing to a technical design that is unique on the market, repairs can be carried out on your PV system quickly and efficiently by a Fronius-trained installer. This means that it is often not necessary to replace a device, saving both time and money.



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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 3,700 employees worldwide, we shift the limits of what's possible - our record of over 800 granted patents is 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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