

# WITH FRONIUS ON THE SUNNY SIDE.

TODAY AND TOMORROW.



FRONIUS: LEADING THE WAY

FOR OVER 70 YEARS



SHIFTING THE LIMITS RIGHT FROM THE START

When Günter Fronius developed the first battery charging system in 1945, he laid the foundations for what the company has represented for over 70 years: the constant search for pioneering solutions to the technical challenges of the times.



In developing new markets for Fronius, our desire never changed: to be the technology and quality leader. Today we have 28 international Fronius subsidiaries and sales partners in more than 60 countries.

HEALTHY
BUSINESS —
EXCELLENT
CREDIT RATING

We at Fronius think in terms of sustainable growth, not quarterly figures. We are not motivated by share prices, but by exciting inno-vations. This enhances our strength and stability.



From top to bottom

/ An interview with our founder Günter Fronius can be found at www.fronius.com/howitbegan

/ Klaus Fronius, Managing Director since 1980 together with his sister Brigitte Strauss. He moved to the Company's Supervisory Board in 2012.

/ Elisabeth Engelbrechtsmüller-Strauss, Managing Director since 2012

The rating agency Dun & Bradstreet (D&B) assigned a best-possible risk indicator of 1 to Fronius for several years now, which firmly underlines our responsible use of resources.

### **MANUFACTURER CHECKLIST:**

/ What services are included within the manufacturer's

/ How is a warranty claim processed?

warranty?

The inverter is the heart of your PV system. Your entire investment's rate of return in the form of generating renewable energy from solar power depends on this inverter. Your choice of inverter should therefore never be left to chance. Ask your-self the following question: which manufacturer promises me the best long-term energy yield from my PV system?

? COMPANY CHECKLIST	$\checkmark$	
/ How long has the company been around for?	/ Fronius was founded by Günter Fronius in 1945	
/ How long has it been active in the field of solar technology?	/ Fronius is active in solar technology since 1992	
/ Is the firm a listed stock corporation?	/ Fronius is privately owned for more than 70 years	
/ Is the firm in a stable ownership structure?	/ Fronius is a family-run company.	
/ Does the company have any alternative sources of revenue?	/ Fronius is successfully active in three industry sectors	
? QUALITY CHECKLIST	$\checkmark$	
/ Does the company have a certified QM system?	/ Fronius has been fully certified in accordance with ISO 9001 for over 20 years	
/ Are the products of a high quality?	/ Fronius stands for high-quality products "Made-in-Austria": our solutions have been regulary awarded the Plus X award	
? SERVICE & SUPPORT CHECKLIST	$\checkmark$	
? SERVICE & SUPPORT CHECKLIST  / Does the company possess a service hotline?	/ Our technical support is available worldwide	
	/ Our technical support is available worldwide / Fronius offers on-site support in more than 70 countries	
/ Does the company possess a service hotline? / Does the company provide service support in my		
/ Does the company possess a service hotline? / Does the company provide service support in my country?		
/ Does the company possess a service hotline? / Does the company provide service support in my country?  PUNCTIONALITY CHECKLIST / Is it possible to upgrade the inverter with new	/ Fronius offers on-site support in more than 70 countries	
/ Does the company possess a service hotline? / Does the company provide service support in my country?  PUNCTIONALITY CHECKLIST / Is it possible to upgrade the inverter with new functions?	/ Fronius offers on-site support in more than 70 countries  / Fronius inverters are fitted with plug-in card slots	
/ Does the company possess a service hotline? / Does the company provide service support in my country?  PUNCTIONALITY CHECKLIST / Is it possible to upgrade the inverter with new functions? / Does the inverter have any open interfaces?	/ Fronius offers on-site support in more than 70 countries  / Fronius inverters are fitted with plug-in card slots / Yes, allowing easy integration into 3rd party systems	
/ Does the company possess a service hotline? / Does the company provide service support in my country?  PUNCTIONALITY CHECKLIST  / Is it possible to upgrade the inverter with new functions? / Does the inverter have any open interfaces? / Can the inverter be serviced on-site?	/ Fronius offers on-site support in more than 70 countries  / Fronius inverters are fitted with plug-in card slots / Yes, allowing easy integration into 3rd party systems	

/ 5-year Fronius Warranty Plus covers: materials, transport,

servicing; 7-year Fronius Warranty covers: materials / Fronius offers a paperless and formless claim handling

procedure with a professional Fronius Support team

## 1.

# DEVELOPED FOR LASTING PERFORMANCE

OFFER YOUR CUSTOMER THE BEST SOLUTION - TODAY AND TOMORROW.

The technological parameters for power generation are constantly evolving. Highly functional inverters that can keep your PV system producing high yields for decades are therefore needed. That is why we make sure that every new solar technology and solution we develop improves reliability, increases energy yield and makes the PV system more future-proof.

Fronius has been fully certified in accordance with ISO 9001 for over 20 years. We subject our inverters to extensive endurance tests during the development phase. Every single Fronius inverter undergoes quality control tests before dispatch. Experience the creation of a quality Fronius product "Made in Austria"!

#### TESTED FOR TARGET LIFESPAN



2,160h NASA Mars Rover Spirit



5,000h Car engine





10,000h Miele washing machine



80.000h Fronius inverter

#### **QUALITY ASSURANCE**

#### **NOMINAL OUTPUT TEST**

Across the entire input voltage range

#### **BURN-IN TEST**

Brief bursts of intensive operation with temperature changes

#### TEST SERIES FOR OPERATIONAL RELIABILITY

High-voltage test, insulation test and functionality test of protection devices

LIVE TEST DATA TRACKING: REACTS
EVEN BEFORE TOLERANCE LIMITS ARE REACHED



MARTIN HACKL GLOBAL DIRECTOR SOLAR ENERGY

"Every day, we work hard to realise our vision of 24 hours of sun, a future powered 100% with renewables. That is why we're developing new solar technologies that inspire our customers and impress through sheer quality."



THOMAS HERNDLER FRONIUS CTO

"Every Fronius inverter is tested thoroughly before dispatch. After all, a penny invested in quality assurance saves a pound for us and our customers."

## 2. / SUPPORT WITHOUT CONDITIONS

WELCOME TO THE FRUSTRATION-FREE ZONE! - EVEN AFTER WARRANTY EXPIRATION.

A warranty certificate alone cannot guarantee competent and uncomplicated problem-solving. Our Fronius Support team on the other hand will never leave you high and dry, irrespective of problem causes, expiry periods and conditions. Another good reason to choose Fronius: we are always here for you.

Breakdowns tend not to obey standard office hours. That is why we developed Fronius Solar Online Support (SOS). Using Fronius SOS, installers can access a guide for solving the problem on-site via a laptop or smartphone using the inverter's serial number, or alternatively initiate the repair process. This also saves effort, time and money.

#### WITH FRONIUS SOS

RETRIEVAL OF DEVICE DATA

ACCESS TO REPAIR INSTRUCTIONS

REQUEST SUPPORT OR REPLACEMENT SERVICE

RETRIEVE CURRENT SERVICE STATUS



#### WAITING PERIODS ON THE TELEPHONE



VIENNA EMERGENCY POLICE SERVICE / Call answered by operator



FRONIUS TECHNICAL SUPPORT / Call answered by solar energy engineers





MOTOR INSURANCE COMPANY / Call answered by hotline staff





**DOMESTIC APPLIANCE MANUFACTURER** / Call answered by hotline staff



SÖNKE LUCHT LUCHT ELEKTRO-TECHNIK

"Fronius SOS is a great platform. Many supposed status errors that arise from grid-side technical difficulties can be corrected quickly and easily over the telephone together with the customer without a site visit being required."



WALTER NAUSCHNEGG ENERGIETECHNIK NAUSCHNEGG

"I have been installing Fronius devices for many years. When it comes down to it, the guys at Fronius Technical Support are always there. Quick, uncomplicated and non-bureaucratic. That's exactly what I want."

## 3. / WE THINK ABOUT TOMORROW

WITH A FRONIUS INVERTER YOU CAN ENSURE LONG TERM CUSTOMER SATISFACTION.

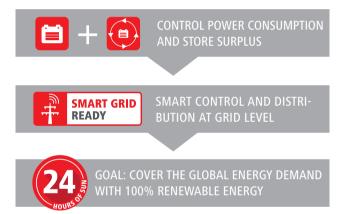
"It's not compatible. That only works with products from company XYZ". So you're not a fan of limiting competition? Neither are we! That's why we will do everything in our power to make sure you do not have to hear such statements from us. Fronius inverters have open data interfaces for integrating third-party components as well as free plug-in card slots for retrofitting new functions.

Here at Fronius, we believe that the developments towards 24 hours of sun and an energy future powered with 100% renewables can be promoted more quickly with the aid of sustainable, profitable solar solutions and cooperation between all drivers of technological innovation!

#### WORKING TOGETHER FOR MORE



#### ALREADY PREPARED FOR 24 HOURS OF SUN





"In order to optimise our self-consumption of solar power, we opted for a LOXONE home automation system. Setting up a data link between Fronius and LOXONE could not have been easier."



JOSEF AUER
PV SYSTEM OWNER

"My 6kWp system soon reached its maximum. That's why I expanded it last year. In addition to using my electricity, I also installed a battery, heat storage and wallbox in order to become independent."

PARTNERSHIP WITHOUT EXPIRY DATE
SETTLEMENT TAKES PLACE AT THE END. THAT IS WHY
SERVICE AND SUPPORT QUALITY ARE CRUCIAL.

Over time, PV systems may require modifications in the course of technological progress. Whether it is for new guidelines on feeding-in energy, technical grid requirements or changes to the grid structure, Fronius product support will give you peace of mind when it comes to these changes.

Our inverters are endurance runners. In case of need they can be easily serviced on site. This saves you and your customers time and money.

#### FASTEST ON-SITE SERVICE

COST-EFFECTIVE AND ENVIRONMENTALLY-FRIENDLY PCB REPLACEMENT

STRING INVERTER REPLACEMENT



MAX. 2 MIN

COMPETITOR PRODUCTS Ø

**10 MIN** 





A. A. REZAEI NAMAD NIROO

"The inverter concept convinced us. The Fronius inverters are extremely quick to install and, as a partner of Fronius, we are able to exchange components on-site to quickly solve the failure."



**RUDOLF MITTER** PV SYSTEM OWNER

"Our PV system has been running with a Fronius Sunrise 2000 inverter since 1996. The Sunrise stopped working once when it was hit by lightning, but even that was quickly repaired."

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# A FRONIUS WARRANTY CAN BE RELIED UPON

A Fronius warranty is backed by a stable family-run business with over 25 years of experience in the solar sector, as well as the outstanding quality of our Fronius Support team and Fronius System Partners.

Our products come with the option of a 5-year Fronius Warranty Plus\* (materials, servicing and transport) or a 7-year Fronius Warranty\* (materials). To take advantage of this free warranty cover, register your product on www.solarweb.com. After registering, you will have access to the following services:

#### WARRANTY COVER OF UP TO 7 YEARS FOR REGISTERED PRODUCTS

/ Register your product on your Fronius Solar.web account and choose your warranty cover.

#### FREE MONITORING OF YOUR SOLAR SYSTEM

/ Fronius Solar.web enables you to easily register your PV system on your Solar.web account via Datalogger ID.

#### STAY INFORMED AND KEEP UP TO DATE WITH YOUR INVERTER

/ Information on newly available functions, accessories, compatible storage units and home-automation solutions.

WARRANTY WITHOUT REGISTRATION	WARRANTY MODELS THAT CAN BE ACTIVATED FREE OF CHARGE AFTER PRODUCT REGISTRATION	
2 YEARS	+ 3 YEARS FRONIUS WARRANTY PLUS	= 5 YEARS
FRONIUS WARRANTY PLUS	+ 5 YEARS FRONIUS WARRANTY	= 7 YEARS

<sup>\*</sup> In order to activate a Fronius warranty model, the product must have been registered. Products can be registered at Fronius Solar.web. Once the product has been registered, the desired warranty model can be activated during the two-year Fronius Warranty Plus cover. Please visit: www.fronius.com/solar/garantie for full details of the countrey-specific warranty terms and conditions.

/ Perfect Welding / Solar Energy / Perfect Charging

#### THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 4,550 employees worldwide and 1,241 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at www.fronius.com

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