

/ Perfect Welding / Solar Energy / Perfect Charging



FRONIUS PRIMO

The communicative inverter for optimised energy management.



SnapINverter
Technology



Integrated data
communication



SuperFlex
Design



Dynamic Peak
Manager



Smart Grid
Ready



Zero feed-in

The Fronius Primo in power categories from 3.0 to 8.2 kW perfectly completes the SnapINverter generation. This single-phase, transformerless device is the ideal inverter for private households.

Its innovative SuperFlex Design provides maximum flexibility in system design, while the SnapINverter mounting system makes installation and maintenance easier than ever before. The communication package included as standard, with WLAN, energy management, several interfaces and much more besides, makes the Fronius Primo a communicative inverter for owner-occupiers.

TECHNICAL DATA FRONIUS PRIMO (3.0-1, 3.5-1, 3.6-1, 4.0-1, 4.6-1)

INPUT DATA	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
Number of MPP trackers			2		
Max. input current ($I_{dc \max 1} / I_{dc \max 2}$)			12.0 A / 12.0 A		
Max. array short circuit current (MPP ₁ /MPP ₂)			18.0 A / 18.0 A		
DC input voltage range ($U_{dc \min} - U_{dc \max}$)			80 - 1000 V		
Feed-in start voltage ($U_{dc \text{ start}}$)			80 V		
Usable MPP voltage range			80 - 800 V		
Number of DC connections			2 + 2		
Max. PV generator output ($P_{dc \max}$)	4.5 kW _{peak}	5.3 kW _{peak}	5.5 kW _{peak}	6.0 kW _{peak}	6.9 kW _{peak}

OUTPUT DATA	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
AC nominal output ($P_{ac,r}$)	3,000 W	3,500 W	3,680 W	4,000 W	4,600 W
Max. output power / max. rated apparent power	3,000 VA	3,500 VA	3,680 VA	4,000 VA	4,600 VA
AC output current ($I_{ac \text{ nom}}$)	13.0 A	15.2 A	16.0 A	17.4 A	20.0 A
Grid connection (voltage range)			1 ~ NPE 220 V / 230 V (180 V - 270 V)		
Frequency (frequency range)			50 Hz / 60 Hz (45 - 65 Hz)		
Total harmonic distortion			< 5 %		
Power factor ($\cos \phi_{ac,r}$)			0.85 - 1 ind. / cap.		

TECHNICAL DATA FRONIUS PRIMO (3.0-1, 3.5-1, 3.6-1, 4.0-1, 4.6-1)

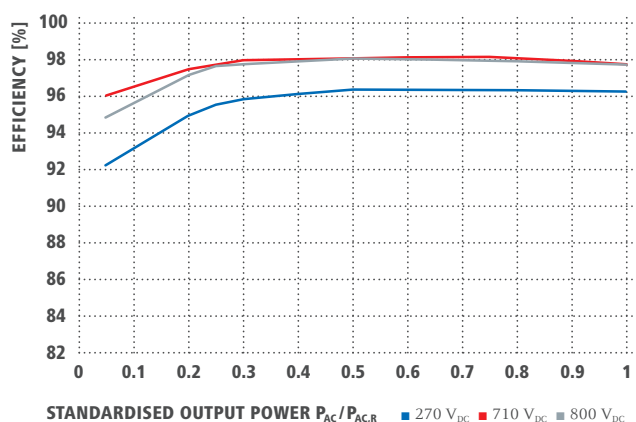
GENERAL DATA	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
Dimensions (height x width x depth)	645 x 431 x 204 mm				
Weight	21.5 kg				
Degree of protection	IP 65				
Protection class	1				
Overvoltage category (DC / AC) ¹⁾	2 / 3				
Night time consumption	< 1 W				
Inverter design	Transformerless				
Cooling	Regulated air cooling				
Installation	Indoor and outdoor installation				
Ambient temperature range	-40 - +55 °C				
Permitted humidity	0 - 100 %				
Max. altitude	4,000 m				
DC connection technology	4x DC+ and 4x DC- screw terminals 2.5 - 16 mm ²				
AC connection technology	3-pole AC screw terminals 2.5 - 16 mm ²				
Certificates and compliance with standards	DIN V VDE 0126-1-1/A1, IEC 62109-1/-2, IEC 62116, IEC 61727, AS 4777-2, AS 4777-3, G83/2, G59/3, CEI 0-21, VDE AR N 4105				
Country of manufacture	Austria				
EFFICIENCY	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
Max. efficiency	98.0 %	98.0 %	98.0 %	98.1 %	98.1 %
European efficiency (η _{EU})	96.1 %	96.8 %	96.8 %	97.0 %	97.0 %
MPP adaptation efficiency	> 99.9 %				
PROTECTIVE DEVICES	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
DC insulation measurement	Yes				
Overload behaviour	Operating point shift. Power limitation				
DC disconnect	Yes				
Reverse polarity protection	Yes				
RCMU	Yes				
INTERFACES	PRIMO 3.0-1	PRIMO 3.5-1	PRIMO 3.6-1	PRIMO 4.0-1	PRIMO 4.6-1
WLAN / Ethernet LAN	Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON)				
6 inputs and 4 digital in/out	Interface to ripple control receiver				
USB (A socket) ²⁾	Datalogging, inverter update via USB flash drive				
2x RS422 (RJ45 socket) ²⁾	Fronius Solar Net				
Signalling output ²⁾	Energy management (potential-free relay output)				
Datalogger and Webserver	Included				
External input ²⁾	S0-Meter Interface / Input for overvoltage protection				
RS485	Modbus RTU SunSpec or meter connection				

¹⁾ According to IEC 62109-1.

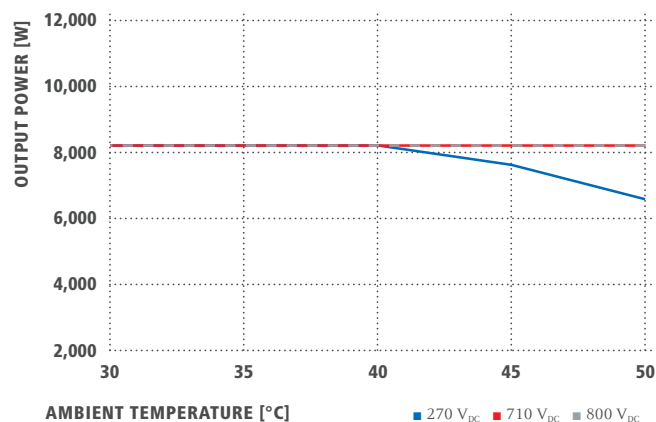
²⁾ Also available in the light version.

Further information regarding the availability of the inverters in your country can be found at www.fronius.com.

FRONIUS PRIMO 8.2-1 EFFICIENCY CURVE



FRONIUS PRIMO 8.2-1 TEMPERATURE DERATING



TECHNICAL DATA FRONIUS PRIMO (5.0-1, 5.0-1 AUS, 5.0-1 SC, 6.0-1, 8.2-1)

INPUT DATA	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
Number of MPP trackers	2				
Max. input current ($I_{dc\ max\ 1} / I_{dc\ max\ 2}$)	12.0 A / 12.0 A	18.0 A / 18.0 A			
Max. array short circuit current (MPP ₁ /MPP ₂)	18.0 A / 18.0 A	27.0 A / 27.0 A			
DC input voltage range ($U_{dc\ min} - U_{dc\ max}$)	80 - 1,000 V				
Feed-in start voltage ($U_{dc\ start}$)	80 V				
Usable MPP voltage range	80 - 800 V				
Number of DC connections	2 + 2				
Max. PV generator output ($P_{dc\ max}$)	7.5 kW _{peak}	7.5 kW _{peak}	7.5 kW _{peak}	9.0 kW _{peak}	12.3 kW _{peak}

OUTPUT DATA	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
AC nominal output ($P_{ac,r}$)	5,000 W	4,600 W	5,000 W	6,000 W	8,200 W
Max. output power / max. rated apparent power	5,000 VA	5,000 VA / 4,600 VA	5,000 VA	6,000 VA	8,200 VA
AC output current ($I_{ac\ nom}$)	21.7 A	21.7 A	21.7 A	26.1 A	35.7 A
Grid connection (voltage range)	1 ~ NPE 220 V / 230 V (180 V - 270 V)				
Frequency (frequency range)	50 Hz / 60 Hz (45 - 65 Hz)				
Total harmonic distortion	< 5 %				
Power factor ($\cos\ \phi_{ac,r}$)	0.85 - 1 ind. / cap.				

GENERAL DATA	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
Dimensions (height x width x depth)	645 x 431 x 204 mm				
Weight	21.5 kg				
Degree of protection	IP 65				
Protection class	1				
Overvoltage category (DC / AC) ¹⁾	2 / 3				
Night time consumption	< 1 W				
Inverter design	Transformerless				
Cooling	Regulated air cooling				
Installation	Indoor and outdoor installation				
Ambient temperature range	-40 - +55 °C				
Permitted humidity	0 - 100 %				
Max. altitude	4,000 m				
DC connection technology	4x DC+ and 4x DC- screw terminals 2.5 - 16 mm ²				
AC connection technology	3-pole AC screw terminals 2.5 - 16 mm ²				
Certificates and compliance with standards	DIN V VDE 0126-1-1/A1, IEC 62109-1/-2, IEC 62116, IEC 61727, AS 4777-2, AS 4777-3, G83/2, G59/3, CEI 0-21, VDE AR N 4105 ²⁾				
Country of manufacture	Austria				

¹⁾ According to IEC 62109-1.

²⁾ Fronius Primo 5.0-1, Fronius Primo 6.0-1 and Fronius Primo 8.2-1 are not fully compliant with VDE AR N 4105. Further information regarding the availability of the inverters in your country can be found at www.fronius.com.

EFFICIENCY	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
Max. efficiency	98.1 %	98.1 %	98.1 %	98.1 %	98.1 %
European efficiency (ηEU)	97.1 %	97.1 %	97.1 %	97.3 %	97.5 %
MPP adaptation efficiency	> 99.9 %				

PROTECTIVE DEVICES	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
DC insulation measurement	Yes				
Overload behaviour	Operating point shift, power limitation				
DC disconnecter	Yes				
Reverse polarity protection	Yes				
RCMU	Yes				

INTERFACES	PRIMO 5.0-1	PRIMO 5.0-1 AUS	PRIMO 5.0-1 SC	PRIMO 6.0-1	PRIMO 8.2-1
WLAN / Ethernet LAN	Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON)				
6 inputs and 4 digital in/out	Interface to ripple control receiver				
USB (A socket) ¹⁾	Datalogging, inverter update via USB flash drive				
2x RS422 (RJ45 socket) ¹⁾	Fronius Solar Net				
Signalling output ¹⁾	Energy management (potential-free relay output)				
Datalogger and Webserver	Included				
External input ¹⁾	50-Meter Interface / Input for overvoltage protection				
RS485	Modbus RTU SunSpec or meter connection				

¹⁾ Also available in the light version.

Further information and technical data can be found at www.fronius.com.

/ 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 5,660 employees worldwide and 1,321 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

Fronius India Private Limited
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4600 Wels
Austria
pv-sales@fronius.com
www.fronius.com



Wels, October 23rd 2019

COUNTRY OF ORIGIN FRONIUS PRIMO

Fronius International GmbH

hereby certifies, that all Fronius solar inverters of type

- / Fronius Primo 3.0-1
- / Fronius Primo 3.5-1
- / Fronius Primo 3.6-1
- / Fronius Primo 4.0-1
- / Fronius Primo 4.6-1
- / Fronius Primo 5.0-1
- / Fronius Primo 5.0-1 AUS
- / Fronius Primo 6.0-1
- / Fronius Primo 8.2-1

are manufactured in Austria.

Fronius International GmbH
Solar Energy
Froniusplatz 1
A-4600 Wels

A handwritten signature in black ink, appearing to read "Ringer".

Ing. Thomas RINGER, BSc MA
Head of Solution Management



Fronius Primo Installation

Installation instruction

Grid connected inverter



Sicherheit DE



WARNUNG! Fehlbedienung und fehlerhaft durchgeführte Arbeiten können schwerwiegende Personen- und Sachschäden verursachen. Die Inbetriebnahme des Wechselrichters darf nur durch geschultes Personal und nur im Rahmen der technischen Bestimmungen erfolgen. Vor der Inbetriebnahme und der Durchführung von Pflegearbeiten die Sicherheitsvorschriften lesen.



WARNUNG! Ein elektrischer Schlag kann tödlich sein. Gefahr durch Netzspannung und DC-Spannung von den Solarmodulen, welche Licht ausgesetzt sind.

- Vor sämtlichen Anschlussarbeiten dafür sorgen, dass AC- und DC-Seite vor dem Wechselrichter spannungsfrei sind.
- Der fixe Anschluss an das öffentliche Stromnetz darf nur von einem konzessionierten Elektroinstallateur hergestellt werden.



WARNUNG! Ein elektrischer Schlag kann tödlich sein. Gefahr durch Netzspannung und DC-Spannung von den Solarmodulen.

- Der DC Hauptschalter dient ausschließlich zum stromlos Schalten des Leistungsteils. Bei ausgeschaltetem DC Hauptschalter steht der Anschlussbereich nach wie vor unter Spannung.
- Sämtliche Wartungs- und Service-Tätigkeiten dürfen nur dann durchgeführt werden, wenn Leistungsteil und Anschlussbereich voneinander getrennt sind.
- Der separate Bereich des Leistungsteils darf nur im spannungsfreien Zustand vom Anschlussbereich getrennt werden.
- Wartungs- und Service-Tätigkeiten im Leistungsteil des Wechselrichters dürfen nur von Fronius-geschultem Servicepersonal durchgeführt werden.



WARNUNG! Ein elektrischer Schlag kann tödlich sein. Gefahr durch Restspannung von Kondensatoren. Entladezeit der Kondensatoren abwarten. Die Entladezeit beträgt 5 Minuten.



WARNUNG! Unzureichende Schutzleiter-Verbindung kann schwerwiegende Personen- und Sachschäden verursachen. Die Gehäuse-Schrauben stellen eine geeignete Schutzleiter-Verbindung für die Erdung des Gehäuses dar und dürfen keinesfalls durch andere Schrauben ohne zuverlässige Schutzleiter-Verbindung ersetzt werden!



VORSICHT! Beschädigungsgefahr des Wechselrichters durch Verschmutzung oder Wasser an den Anschlussklemmen und Kontakten des Anschlussbereiches.

- Beim Bohren darauf achten, dass Anschlussklemmen und Kontakte am Anschlussbereich nicht verschmutzt oder nass werden.
- Die Wandhalterung ohne Leistungsteil entspricht nicht der Schutzart des ganzen Wechselrichters und darf daher nicht ohne Leistungsteil montiert werden.
Wandhalterung bei der Montage vor Verschmutzung und Feuchtigkeit schützen.



VORSICHT! Beschädigungsgefahr des Wechselrichters durch nicht ordnungsgemäß angezogene Anschlussklemmen. Nicht ordnungsgemäß angezogene Anschlussklemmen können thermische Schäden am Wechselrichter verursachen und in Folge zu Bränden führen. Beim Anschließen von AC- und DC-Kabeln darauf achten, dass alle Anschlussklemmen mit dem angegebenen Drehmoment fest angezogen sind.



VORSICHT! Beschädigungsgefahr des Wechselrichters durch Überlast.

- Maximal 36 A an einer einzelnen DC-Anschlussklemme anschließen.
- DC+ und DC- Kabel polrichtig an den DC+ und DC- Anschlussklemmen des Wechselrichters anschließen.



HINWEIS! Beim Anschließen von DC-Kabeln auf korrekte Polarität achten.



HINWEIS! Die Schutzart IP 65 gilt nur, wenn

- der Wechselrichter in der Wandhalterung eingehängt und fest mit der Wandhalterung verschraubt ist,
- die Abdeckung des Datenkommunikationsbereiches am Wechselrichter montiert und fest verschraubt ist.

Für die Wandhalterung ohne Wechselrichter gilt Schutzart IP 20!



HINWEIS! Beim Anschließen von Aluminiumkabeln:

- nationale und internationale Richtlinien zum Anschließen von Aluminiumkabeln berücksichtigen
- Angaben des Kabelherstellers beachten.
- Jährlich den festen Sitz der Kabel entsprechend dem angegebenen Drehmoment überprüfen.



HINWEIS! Für die Erdung von Solarmodul-Rahmen oder -Gestellen die entsprechenden Angaben des Solarmodul-Herstellers sowie nationale Richtlinien berücksichtigen.



HINWEIS! Beim Umgang mit Optionskarten die allgemeinen ESD-Bestimmungen beachten.



HINWEIS! Wird der Wechselrichter in Australien oder Neuseeland installiert (geforderte Norm: AS4777.2:2015) darf der Wechselrichter **nicht** in einer 3-Phasen Kombination verwendet werden, da es keine kommunikative Kopplung zwischen den Wechselrichtern gibt



VORSICHT! Beschädigungsgefahr von Wechselrichtern und anderen stromführenden Bauteilen einer Photovoltaikanlage durch mangelhafte oder unsachgemäße Installationen.

Mangelhafte oder unsachgemäße Installationen können zur Überhitzung von Kabeln und Klemmstellen sowie zum Entstehen von Lichtbögen führen. Hieraus können thermische Schäden resultieren, die in Folge zu Bränden führen können.

Beim Anschließen von AC- und DC-Kabeln folgendes beachten:

- Alle Anschlussklemmen mit dem in der Bedienungsanleitung angegebenen Drehmoment fest anziehen
- Alle Erdungsklemmen (PE / GND) mit dem in der Bedienungsanleitung angegebenen Drehmoment fest anziehen, auch freie Erdungsklemmen
- Kabel nicht überlasten
- Kabel auf Beschädigung und korrekte Verlegung überprüfen
- Sicherheitshinweise, Bedienungsanleitung sowie lokale Anschlussbestimmungen berücksichtigen

Den Wechselrichter immer mittels Fixierungsschrauben mit dem in der Bedienungsanleitung angegebenen Drehmoment fest an der Montagehalterung verschrauben.

Wechselrichter ausschließlich mit festgezogenen Fixierungsschrauben in Betrieb nehmen!

Die Herstellervorgaben für Anschluss, Installation und Betrieb sind unbedingt einzuhalten. Führen Sie sorgfältig alle Installationen und Verbindungen den Vorgaben und Vorschriften entsprechend aus, um das Gefahrenpotential auf ein Minimum zu reduzieren. Die Anzugsmomente an den jeweiligen Klemmstellen entnehmen Sie der Bedienungsanleitung / Installationsanleitung der Geräte.

Fronius Werksgarantie

Detaillierte, länderspezifische Garantiebedingungen sind im Internet erhältlich:
www.fronius.com/solar/garantie

Um die volle Garantielaufzeit für Ihren neu installierten Fronius Wechselrichter oder Speicher zu erhalten, registrieren Sie sich bitte unter: www.solarweb.com.

Safety EN



WARNING! Incorrect operation or poorly executed work can cause serious injury or damage. Only qualified personnel are authorised to commission your inverter and only within the scope of the respective technical regulations. Read the safety rules before commissioning the equipment or carrying out maintenance work.



WARNING! An electric shock can be fatal. Danger due to grid voltage and DC voltage from solar modules that are exposed to light.

- Prior to any connection work, disconnect the inverter on the AC side and the DC side.
- Only an authorised electrical engineer is permitted to connect this equipment to the public grid.



WARNING! An electric shock can be fatal. Danger due to grid voltage and DC voltage from solar modules.

- The DC main switch is only to be used to de-energise the power stage set. The connection area is still live when the DC main switch is switched off.
- Ensure that the power stage set and connection area are disconnected from one another before carrying out any maintenance or service tasks.
- The power stage set, which is enclosed in a separate housing, must only be disconnected from the connection area when in a de-energized state.
- Maintenance and servicing in the power stage set of the inverter must only be carried out by Fronius-trained service technicians.



WARNING! An electric shock can be fatal. Danger due to residual voltage in capacitors. Wait for the capacitors to discharge. The discharge time is five minutes.



WARNING! An inadequate ground conductor connection can cause serious injury or damage to property. The housing screws provide a suitable ground conductor connection for grounding the housing and must NOT be replaced by any other screws that do not provide a reliable ground conductor connection.



CAUTION! Risk of damage to the inverter from dirt or water on the terminals and contacts of the connection area.

- When drilling, ensure that terminals and contacts in the connection area do not become dirty or wet.
- Without a power stage set, the mounting bracket does not conform to the protection class of the inverter as a whole and so must not be installed without the power stage set. The mounting bracket should be protected from dirt and moisture during installation.



CAUTION! Risk of damage to the inverter as the result of incorrectly tightened terminals. Incorrectly tightened terminals can cause heat damage to the inverter that may result in a fire. When connecting AC and DC cables, ensure that all the terminals are tightened to the specified torque.



CAUTION! Risk of damage to the inverter from overload.

- The maximum amperage when connecting to a single DC terminal is 36 A.
- Connect the DC+ and DC- cables to the DC+ and DC- terminals on the inverter, taking care to ensure that the polarity is correct.



NOTE! Ensure the polarity is correct when connecting the DC cables.



NOTE! Degree of protection IP 65 is only applicable if

- the inverter is placed in the mounting bracket and permanently attached using screws
- the cover for the data communication area is permanently attached to the inverter with screws

Degree of protection IP 20 applies to the mounting bracket with no inverter.



NOTE! When connecting aluminium cables:

- Observe national and international guidelines regarding the connection of aluminium cables
- Follow the instructions of the cable manufacturer
- Check every year that the cables are securely attached in accordance with the specified torque



NOTE! For grounding solar module frames or racks, the relevant specifications from the solar module manufacturer must be taken into account along with national guidelines.



NOTE! Observe the ESD guidelines when using option cards.



NOTE! If the inverter is installed in Australia or New Zealand (required standard: AS4777.2:2015), the inverter must **not** be used as part of a three-phase combination, as there is no communication link between the inverters



CAUTION! Risk of damage to inverters and other live photovoltaic system components due to poor or unprofessional installation.

Poor or unprofessional installation can cause overheating of cables and terminal connections and result in arcs. These can cause heat damage, which in turn may lead to fires.

Observe the following when connecting AC and DC cables:

- Tighten all terminals to the torque specified in the Operating Instructions
- Tighten all grounding terminals (PE / GND), including free ones, to the torque specified in the Operating Instructions
- Do not overload cables
- Check cables for damage and verify that they are laid correctly
- Take note of the safety instructions, Operating Instructions and any local connection regulations

Using fastening screws, always screw the inverter firmly to the mounting bracket to the torque specified in the Operating Instructions.

Ensure that the fastening screws are tight before starting the inverter!

Observe the manufacturer's connection, Installation and Operating Instructions at all times. To reduce the hazard potential to a minimum, perform all installation and connection work carefully according to the instructions and regulations. Refer to the device Operating Instructions / Installation Instructions for the tightening torques to be used at the relevant terminal connections.

Fronius manufacturer's warranty

Detailed, country-specific warranty terms are available on the internet:
www.fronius.com/solar/warranty

To obtain the full warranty period for your newly installed Fronius inverter or storage system, please register at: www.solarweb.com.



WARRANTY CONDITIONS FOR PRODUCTS OF THE FRONIUS SOLAR ENERGY BUSINESS UNIT FRONIUS WARRANTY AND FRONIUS WARRANTY PLUS

(Valid from: 01.01.2022)

1. General remarks

1.1. Fronius International GmbH (hereinafter FRONIUS) grants a voluntary manufacturer's warranty (Fronius Warranty or Fronius Warranty Plus) for the products it manufactures listed in section 2.1 (hereinafter "covered products") for the product warranty period specified and applicable below (hereinafter "warranty period"). The content and scope of the warranty statement issued by FRONIUS are defined exclusively by the following warranty conditions.

1.2. FRONIUS is entitled to amend these warranty conditions at any time with effect for the future. The warranty conditions are always those applicable at the time of product purchase.

1.3. **This warranty is in addition to and does not limit any legal or contractual claims or rights of the warranty holder.**

2. Scope

2.1. Covered products: The warranty applies to products purchased directly from FRONIUS, from an authorised FRONIUS distributor or professional installation company as new equipment and put into operation by a professional installer in accordance with the Operating and Installation Instructions. It refers exclusively to the device notified to FRONIUS with its serial number as part of the commissioning process and is limited to devices in the following product groups:

Fronius Inverter,
Fronius Datamanager,
Fronius Smart Meter,
Fronius Ohmpilot.

The following are excluded:

- Components of covered products that are subject to regular wear and tear. These include DC isolators, fuses, bayonet connectors, varistors, surge arresters, string fuses and mechanical screw connections if they are not properly tightened to the correct torque during installation.
- Devices provided by FRONIUS to customers as prototypes for test purposes.
- All parts or components not originally sold or marketed by FRONIUS are excluded from this warranty. This applies, for example, to all other components of the photovoltaic system, system expansions and components for system monitoring and data communication.

2.2. Warrantor: The warrantor is Fronius International GmbH, Froniusstrasse 1, A-4643 Pettenbach, Austria.

2.3. Warranty holder: The warranty holder is a person who has acquired the covered product pursuant to point 2.1 and is operating it for the first time in accordance with its intended use (first operator). Distributors and other resellers who do not operate the product for their own purposes are not entitled to the warranty. The warranty may be transferred by a first operator to another person together with the covered product and maintained, provided that (1) the covered product is not removed from the place of first use and (2) no modifications are made to the covered product. No new warranty agreement is entered into with the legal successor, who merely takes over the warranty of the first operator to the extent that it existed in relation to the first operator at the time of transfer. A legal successor who fulfils the applicable requirements is free to take out warranty extensions; see Section 9.

2.4 The warranty applies only to covered products started for the first time in Australia and New Zealand.

3. Warranty claim

3.1. A warranty claim exists if

- the covered product has a material or manufacturing defect for which FRONIUS is responsible,
- such a defect affects the operation of the covered product,
- the defect occurs during normal use of the covered product,
- and the warranty holder's claim is not excluded on the basis of Section 5 (warranty exclusions).

3.2. Defects that do not affect the proper functioning of the product (visual defects, blemishes) are not covered by this warranty.

4. Software updates

4.1. For the GEN24 product series and product series first placed on the market after 1 September 2020, the following applies:

4.2 If the warranty holder has **consented** to online access by FRONIUS, updates may be carried out automatically by FRONIUS. Prerequisites for online access by FRONIUS are (1) the establishment of a network connection with the covered product, (2) full commissioning including connection to FRONIUS Solar.web and (3) cost-free provision and maintenance of an Internet connection by the warranty holder.

Online access allows FRONIUS to detect technical malfunctions. As soon as a malfunction is diagnosed that requires intervention by FRONIUS to prevent a defect, it can be rectified by remote maintenance. As a result, further technical problems and damage to the product can be avoided and initial countermeasures can be taken depending on the detected malfunction.

4.3. If the warranty holder has **not consented** to online access by FRONIUS, software updates may alternatively be installed by the warranty holder through a system partner authorised by FRONIUS. In this case, FRONIUS provides only the



software update free of charge. FRONIUS will not bear additional costs of updating by the service partner (travel costs, labour, etc.) and such costs shall be borne by the warranty holder himself.

4.4. FRONIUS will always announce software updates at www.fronius.com/solar/softwareupdates. It is the warranty holder's responsibility to view announcements on a regular basis (at least every 3 months) and ensure that the necessary software updates are installed. Software updates include not only security and function-relevant adjustments, but also improvements to interfaces, known bug fixes and successive new features. Timely installation of software updates guarantees the best possible performance and serviceability of the covered product. It is the warranty holder's responsibility to ensure that the Internet connection is maintained during the warranty period. See Section 5 of the warranty conditions.

4.5. The warranty holder is also obliged to follow the Operating Instructions in the event of malfunctions or errors during operation.

5. Warranty exclusions

5.1. Warranty claims are excluded if the claimed defect was partly caused by:

- Failure to comply with the Installation or Operating Instructions during installation, commissioning and operation, and installation, commissioning or repair other than in compliance with relevant technical and professional standards
- Improper transport, storage or packaging
- Use of the covered product in a manner not corresponding to normal use
- Non-compliance with safety regulations for proper use
- Inadequate ventilation of the covered product
- Operation of the covered product in emergency power mode for more than the number of operating hours specified in the Operating Instructions
- Lack of maintenance or improper maintenance according to the Operating Instructions
- Non-installation or late installation of necessary software updates, unless the warranty holder has consented to online access by FRONIUS for the covered product according to 4.2
- Unauthorised intervention or intervention by third parties not authorised by FRONIUS in the covered product, in the form of openings, modifications, repairs, conversions and use of accessories not authorised by FRONIUS.
- Events that are due to circumstances for which FRONIUS is not responsible or that are not attributable to normal operating conditions, such as power fluctuations, overvoltage, lightning, fire, flooding, tampering or damage caused by the warranty holder or third parties, impact of foreign objects
- Force majeure.
- No claims for energy that has not been fed into the grid or energy that has not been used for self-consumption, etc.

6. Warranty services

6.1. In the event of a warranty claim, FRONIUS may choose from the following options:

- the defective unit is repaired on site or in a Repair Center operated or appointed by FRONIUS,
- the defective unit is exchanged for an equivalent unit of the same age, type and condition, or
- a credit note is issued for the market value applicable at the time of the service notification, which can be used to purchase a new FRONIUS product.

6.2 In case of repair on site:

If FRONIUS decides that the defective unit should be repaired on site, the repair must be carried out by FRONIUS or a professional installer authorised by FRONIUS. The costs to be borne by FRONIUS depend on the applicable warranty model; see Section 7. The warranty holder shall provide unobstructed access to the covered products and provide any apparatus required by applicable occupational safety regulations free of charge.

6.3 In case of repair in a Repair Center operated or appointed by FRONIUS: If FRONIUS decides that the defective unit is to be repaired in a Repair Center operated by FRONIUS, the warranty holder shall ensure proper dismantling and transport to the Repair Center notified by FRONIUS. FRONIUS will arrange for the return of the repaired unit.

6.4 If FRONIUS decides that the defective unit is to be replaced, the Warranty holder undertakes to ensure proper dismantling and transport of the defective unit to the address notified by FRONIUS. FRONIUS may, at its discretion, arrange for a replacement unit to be sent before the defective unit is returned. In this case, FRONIUS is entitled to demand financial security in the amount of the value of the replacement unit, including transport costs. FRONIUS retains ownership of the supplied replacement unit until the defective unit has been received.

7. Warranty models

7.1. FRONIUS will only bear the costs arising in connection with warranty services to the extent of the respective warranty model declared applicable to the covered product in accordance with Table 1 ("Fronius Warranty" or "Fronius Warranty Plus").

7.2. "Fronius Warranty" model:

FRONIUS provides the following service under the "Fronius Warranty":

- The required spare part or the equivalent replacement unit is provided or the market value is refunded.



The following are not refunded:

- Costs of repair on site or at FRONIUS incurred in connection with the repair or provision of a replacement unit (travel costs and travel expenses, removal and installation costs relating to the defective component or unit, hours worked, repairs to the defective component or unit, installation of the replacement component, assembly of the replacement unit, etc.).
- Costs of shipping and transport to FRONIUS or to a FRONIUS Repair Center (including customs duties, export certificates, etc.) for the defective components or the defective unit and return of the replacement components or replacement unit to the warranty holder.

7.3. "Fronius Warranty Plus" model:

FRONIUS provides the following services under the "Fronius Warranty Plus":

- The required spare part or the equivalent replacement unit is provided or the market value is refunded.
- FRONIUS bears the repair costs directly related to the removal and replacement of the component or the replacement unit if these services are carried out by FRONIUS or a professional installer appointed by FRONIUS.
- FRONIUS bears domestic shipping and transport costs of the FRONIUS components and of the defective unit to the nearest FRONIUS Repair Centre and of the replacement components or replacement unit.

The following are not refunded:

- Travel expenses, export certificates or customs duties are not covered by FRONIUS.
- Costs of work on other equipment of the warranty holder are not covered (necessary modifications to the existing photovoltaic system, the house installation or other equipment).
- However, due to technological progress, it is possible that a provided spare part or replacement unit is not compatible with the system monitoring or other components installed on site. Resulting costs and expenses are not part of this warranty and are not covered by FRONIUS.
- Costs of express deliveries are not covered.

7.4. Cost acceptance: If costs are incurred in providing warranty services for which FRONIUS is not liable under the applicable warranty model, these costs shall be borne by the warranty holder. FRONIUS may also check at any time whether the claim for warranty services is justified. If FRONIUS concludes that no warranty claim exists, the warranty holder must also bear the costs of materials, repair or replacement normally covered by the warranty (see either section 7.2. or 7.3.). FRONIUS is not obliged to provide services if the warranty holder or their authorised representative does not agree to bear the costs.

8. Warranty period

8.1 The warranty begins on the date of delivery of the covered product ex works FRONIUS. The warranty holder can find out the date by visiting www.solarweb.com and entering the serial number. The relevant warranty period is shown in Table 1.

8.2 If the unit is registered at www.solarweb.com within 30 months of delivery ex works FRONIUS, the warranty will commence on the date of commissioning rather than the date of delivery. The date of using for the first time must be entered during product registration.

8.3 If the covered product is replaced or repaired, the warranty period for the replaced or repaired product or component will not start afresh and no new warranty certificate will be issued. In this case too, the warranty ends on the date when the warranty for the originally delivered product covered by the warranty ends.

9. Warranty extensions

9.1 FRONIUS provides various options (free of charge or against payment) to extend the warranty for covered products; see Table 1. Warranty extensions are subject to the warranty conditions applicable at the time the original warranty agreement was concluded.

9.2 Warranty extensions can only be applied for within the specified period and in the manner indicated in Table 1. The warranty extension starts at the end of the original warranty period and is extended by the period of time stated in Table 1 and requested by the warranty holder.

9.3 A warranty extension always applies only to the product uniquely identified by the serial number.

9.4 If the warranty holder is given the option of extending the warranty against payment, the following also applies: The warranty extension only becomes effective upon payment in full. As long as the warranty holder is in default of payment, FRONIUS is not obliged to provide warranty services.

Table 1 – Covered product, warranty model, warranty period, warranty extension option:

	Inverter	Datamanager	Fronius Smart Meter	Fronius Ohmpilot
Warranty services from dispatch from Fronius factory	Fronius Warranty Plus	Fronius Warranty Plus	Fronius Warranty Plus	Fronius Warranty Plus
Warranty period from dispatch from Fronius factory	5 years	5 years	2 years	2 years
Free warranty extension	<ul style="list-style-type: none"> ✓ Possible ✓ Extension period and warranty model: <ul style="list-style-type: none"> - to 10 years for Fronius Warranty ✓ Conditions of eligibility: <ul style="list-style-type: none"> - Registration via www.solarweb.com - within 30 months of delivery 	Automatically takes over the warranty period of the inverter in which the Datamanager has been installed.	<ul style="list-style-type: none"> ✓ Free warranty extension to a total of 5 years Fronius Warranty Plus ✓ valid for all Smart Meter's installed between 01.04.2021 and 31.12.2022 	No warranty extension possible
Paid warranty extension	<ul style="list-style-type: none"> ✓ Possible ✓ Extension period and warranty model: <ul style="list-style-type: none"> - to 10, 15, 20 years for Fronius Warranty or Fronius Warranty Plus - annual extension up to max. 15 years ✓ Conditions of eligibility: <ul style="list-style-type: none"> - Registration via www.solarweb.com - within 30 months of delivery 	Automatically takes over the warranty period of the inverter in which the Datamanager has been installed.	No warranty extension possible	No warranty extension possible

10. Claiming services under warranty

10.1. The warranty holder must notify FRONIUS of any warranty claim for the covered product within the warranty period. To ensure efficient processing, the warranty holder should first contact their competent professional installer and instruct the installer to contact FRONIUS and deal with the service case. The following are required in order for FRONIUS to process warranty claims: (1) the commissioning report (including date of acceptance, date of commissioning, report of the energy company), (2) the invoice (including serial number), (3) a photo with fully legible type plate (4), proof of payment of the warranty extension fee if applicable, (5) full payment of the covered product or warranty extension.

10.2 While the claim is being processed, the warranty holder or their authorised representative must also provide FRONIUS with all further information in order to be able to carry out a proper fault diagnosis.

10.3. As long as the warranty holder or their authorised representative fails to meet the obligations according to Sections 10.1. and 10.2., FRONIUS shall not be obliged to provide services under this warranty. The warranty services must be agreed in advance with FRONIUS.

11. Data privacy statement

11.1. If warranty extensions are claimed via www.solarweb.com, FRONIUS will process personal data of the warranty holder.

11.2. If the warranty holder registers the product online, data will be processed by FRONIUS for the purpose of providing services. For detailed information, please refer to the data privacy statement at www.fronius.com.

12. Applicable law, jurisdiction

12.1. Claims arising from or in connection with this warranty are subject to Austrian law, to the exclusion of the UN Sales Convention. The place of performance for obligations under this warranty is Wels, Austria. If the warranty holder is a consumer according to Art. 6 of Regulation (EC) No. 593/2008, the choice of Austrian law shall not result in the consumer being deprived of the protection granted to them by the law of the country where they have their habitual residence and which cannot be derogated from by agreement.

12.2. If the warranty holder is not a consumer, the exclusive place of jurisdiction is Wels, Austria.

13. Other legal information

In Australia, this warranty is given by, and all Australian warranty claims should be directed to: Fronius Australia Pty Ltd, 90-92 Lambeck Drive, Tullamarine, VIC 3043, Telephone 03 8340 2900, Email pv-supportaustralia@fronius.com The benefits to the consumer given by this manufacturer's warranty are in addition to other rights and remedies of the consumer that are stipulated by law, and which are not affected by this manufacturer's warranty. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The general delivery and payment terms and conditions located on our website (www.fronius.com.au) under "Terms and conditions" are in effect unless these warranty conditions allow more favorable provisions. Previously valid warranty conditions are replaced by these conditions.