

FRONIUS SMART METER TS

The bidirectional meter for intelligent energy management



The Fronius Smart Meter TS is a bidirectional meter, which optimises self-consumption, records the load curve and controls the various energy flows. Thanks to highly accurate measurements and rapid communication via the Modbus RTU interface, dynamic feed-in control when feed-in limits are imposed is faster and more accurate than with the S0 meter.

Together with the Fronius Solar.web, the Smart Meter TS presents a clear overview of the power consumption. In combination with the Fronius storage solutions, the device ensures a perfect coordination of various energy flows, which optimises the entire energy management. The Fronius Smart Meter TS is ideally suited for use with the GEN24 Plus and Tauro, as well as all Fronius inverters with the Fronius Datamanager 2.0.

FRONIUS SMART METER TS

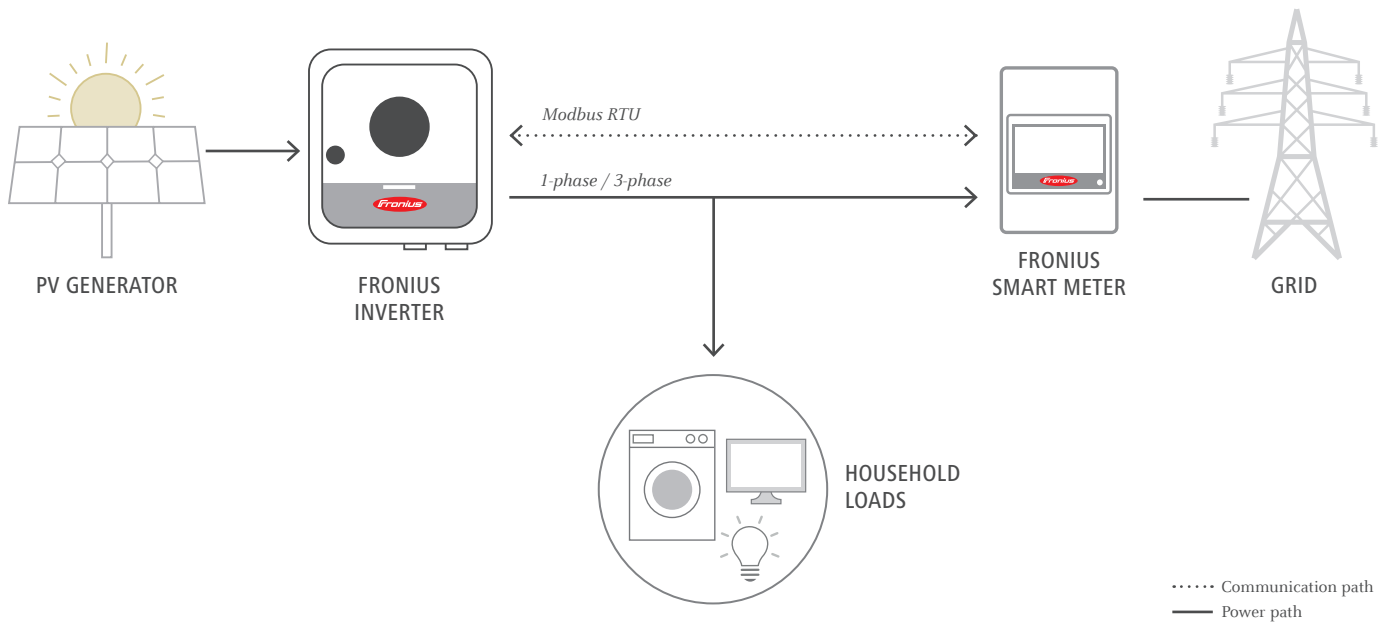
TECHNICAL DATA	FRONIUS SMART METER TS 100A -1	FRONIUS SMART METER TS 65A -3	FRONIUS SMART METER TS 5KA -3
Nominal voltage	230 V	208 - 400 V	400 - 480 V
Operating voltage range	-30% - +20%	-20% - +20%	-20% - +15%
Nominal frequency		50 to 60 Hz	
Grid frequency range		45 to 65 Hz	
Maximum current	1 x 100 A	3 x 65 A	3 x 5000 A
Power line cross section	1 - 25 mm ²	1 - 16 mm ²	1 - 4 mm ²
Neutral line cross section	1 - 25 mm ²	0.05 - 1.5mm ²	1 - 4 mm ²
Communication line cross section		0.05 - 1.5 mm ²	
Power consumption		<=1W	
Starting current	40 mA	20 mA	10 mA
Accuracy class		1	
Active energy accuracy		Class 1 (EN62053-21) / Class B (EN50470-3)	
Reactive energy accuracy		Class 2 (EN 62053-23)	
Short-time overcurrent	3000A/10ms	1950A/10ms	30A/500ms
Mounting		Indoors (DIN rail)	
Housing	2 modules DIN 43880	3 modules DIN 43880	3 modules DIN 43880
Degree of protection		IP 51 (front frame), IP 20 (terminals)	
Ambient temperature range		-25 to +65°C	
Dimensions (Height x Width x Depth)	91.5 x 35.8 x 63.0	91.5 x 53.8 x 63.0 mm	91.5 x 53.8 x 63.0 mm
Interface to inverter		Modbus RTU (RS485)	
Display		3 x 8 digit / Touchscreen	

THE ADVANTAGES AT A GLANCE

- / Fast and accurate dynamic feed-in control
- / Clear overview of power consumption in Fronius Solar.web
- / Energy management with Fronius storage solutions
- / Identifying opportunities to optimize the pv system
- / Monitoring and analyzing heavy loads



CONFIGURATION DIAGRAM



The Fronius Smart Meter is compatible with all inverters with an RS485 interface (Modbus RTU). The Fronius Smart Meter can be retrofitted at any time together with the Fronius Datamanager 2.0 in inverters that have already been installed.

/ 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 5,440 employees worldwide and 1,264 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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**TAKE COMPLETE CONTROL OF
YOUR PV SYSTEM
WITH FRONIUS SMART PACKAGES**



WHAT IS A FRONIUS SMART PACKAGE?

In order to use your PV system and the energy produced to its full potential, you need it to work smarter for you so you can make informed decisions about your energy usage.

Fronius offers a range of products to create a complete and intelligent solution that allows you to get the most from your PV system. We've compiled four smart packages to suit your requirements and budget.

WHAT IS INCLUDED?

ENERGY PRODUCTION

- / Fronius SnapINverter
- / Fronius Solar.web system monitoring



VISUALISATION AND EXPORT LIMITATION

- / Fronius SnapINverter
- / Fronius Smart Meter and CT Clamps
- / Fronius Solar.web system monitoring



SMART PV PACKAGES

For all requirements and budgets.

SELF-CONSUMPTION OPTIMISER

- / Fronius SnapINverter
- / Fronius Smart Meter and CT Clamps
- / Fronius Solar.web system monitoring
- / Fronius Ohmpilot



24 HOURS OF SUN

- / Fronius SnapINverter
- / SOLARWATT MyReserve
- / SOLARWATT Energy Manager



WHY SHOULD I CHOOSE A SNAPINVERTER?



Fronius inverters are efficient and reliable and form the indispensable heart of every photovoltaic system. Power categories ranging from 3kW to 27kW guarantee suitability for virtually any system size – from a family home to a large-scale system.

Efficient and reliable, Fronius has a range of inverters suitable for both domestic and commercial PV systems all with in-built communications for system monitoring and energy management. Intelligent design makes them easy to install and service while the superflex design and dynamic peak manager makes them perfect for any roof orientation and shading.

DO I REALLY NEED A SMART METER?

Adding a Fronius Smart Meter to your PV system will provide you with your system's production and consumption data and present it graphically in Fronius Solar.web. You can then maximise your energy efficiency and have full control of your system without sending any data back to your energy supplier. The Smart Meter can also be used to limit the amount of energy exported back to the grid.

WHAT'S ALL THE FUSS ABOUT MONITORING?

Fronius Solar.web is our free online portal that allows system owners to easily see their energy production and consumption* data from their smart phone, tablet, PC, laptop or Apple Watch and receive system alerts.

*If a Fronius Smart Meter is installed.



In times of declining government energy initiatives and people striving for self-sufficiency, the monitoring of consumers becomes an essential part of every PV system. Fronius Solar.web not only helps you to increase your rate of self-consumption, it is also the perfect tool to analyse your needs and to grow and enhance your PV system, like adding energy storage, for example.

WHAT IS THE OHMPILOT? WHAT DOES IT DO?



The Fronius Ohmpilot is our energy diversion solution. This enables you to use your excess PV system generated electricity to heat your water or towel radiator, minimising your grid reliance and maximising your self-consumption. It is compatible with both single and three-phase inverters, perfect for the home or business.

A large proportion of energy requirements within a home or building are for heat, so it makes sense to use your excess PV system generated electricity to do this. By adding a Fronius Ohmpilot to your PV system, you can heat your water, power an infrared heater, towel radiator or any other resistive load, maximising your self-consumption and increase energy savings.

CAN I USE MY PV ENERGY AT NIGHT?

The goal of an energy storage solution is to aid as much consumption as possible of your self-generated PV energy at source and store surplus energy for when it is needed, guaranteeing maximum energy independence.



Yes you can! With an energy storage solution from SOLARWATT, you can store your PV generated electricity during the day and use it at night, maximising your self-consumption and PV system capabilities. SOLARWATT's MyReserve is an expandable energy storage solution suitable for a domestic home or office, up to an industrial unit or factory and is compatible with Fronius single and three-phase inverters.

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