

/ Perfect Welding / Solar Energy / Perfect Charging



# FRONIUS SNAPINVERTERS

SMARTER, LIGHTER, MORE FLEXIBLE.



FRONIUS SYMO

# FRONIUS SNAPINVERTERS

**MADE IN AUSTRIA**

With the SnapINverter product range, Fronius covers the entire spectrum of market requirements, whether for a single-family home or a large photovoltaic (PV) system. Customers opting for a Fronius SnapINverter are not only rewarded with a smart inverter that maximises yield, but also with the quality assurance of a company that has been leading the way since 1945. With the Fronius 'Smarter, Lighter, More Flexible' SnapINverter range, future-proof comes as standard, and that's just the beginning.

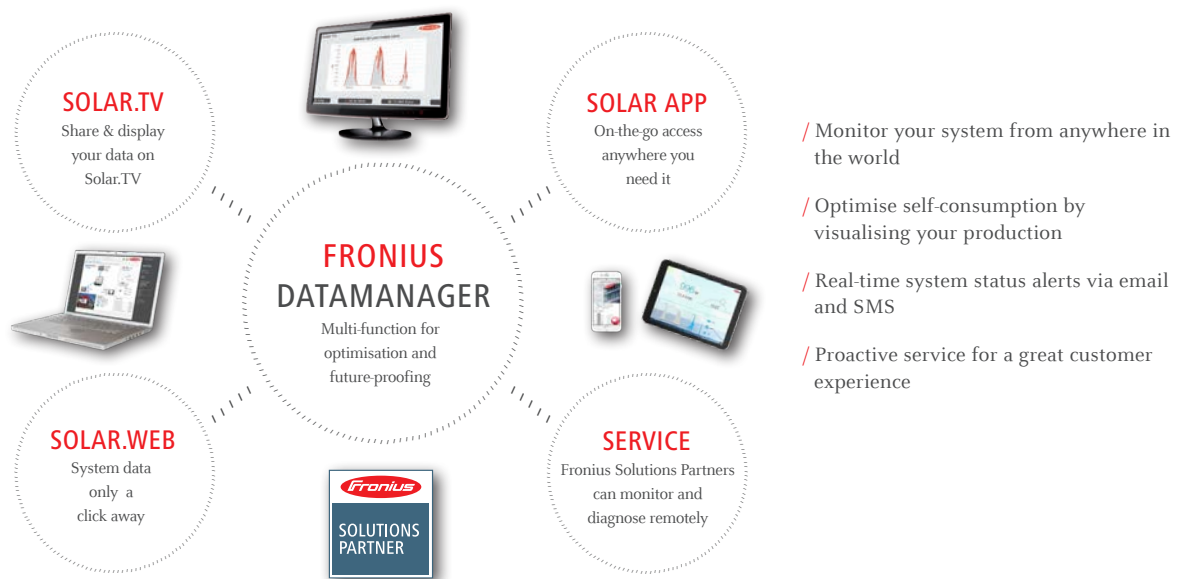


## SMARTER



### WI-FI SYSTEM MONITORING

The Fronius SnapINverter range efficiently meets data communication and system monitoring needs. An integrated Datamanager ensures easy connection to the internet via Wi-Fi or Ethernet. Keep an eye on your yield using your PC, smart phone or tablet - without any extra cost.



### SMART GRID READY

As the number of decentralised energy generators rises, so too does the need for an intelligent power grid. In the near future, grid operators will impose new requirements on local generators including photovoltaic systems - requirements the Fronius SnapINverter range already meets today.



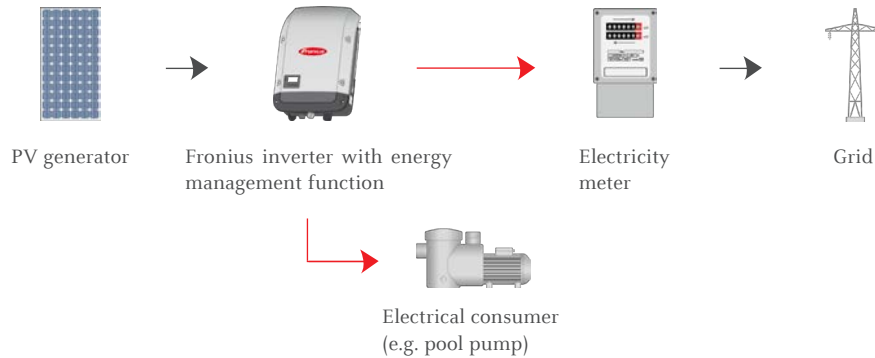
### OPEN DATA COMMUNICATION

It is easy to connect Fronius SnapINverters to components from third party suppliers. The open SunSpec Modbus TCP, RTU (RS485) and JSON protocols provide a simple way of establishing a data connection to other systems such as BMS, SCADA and home automation.



## ENERGY MANAGEMENT FUNCTION

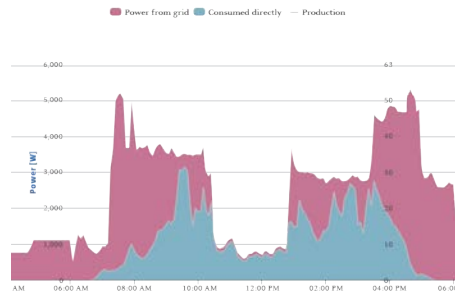
With an integrated energy management function, the Fronius SnapINverter can control the power flow directed to a specific electrical appliance based on the power production of the PV system. This automatic load shifting optimises self-consumption of generated solar power, fast tracking payback.



## EXPORT LIMITATION

The Fronius SnapINverter range\* in conjunction with a Fronius Smart Meter can be configured to achieve a grid export limit from -10% to 100% of the system rating. The system just requires a SnapINverter with inbuilt Datamanager and a Fronius Smart Meter.

\*except the Fronius Symo Hybrid.

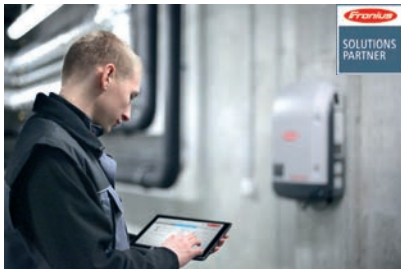


- / Cost effective
- / Easy setup
- / Dynamic power reduction to gain maximum energy and optimise self-consumption



## PROACTIVE SERVICE

Trained by Fronius, Fronius Solutions Partners (FSPs) can remotely monitor a PV system using Fronius Solar.web. In the event of a fault, FSPs receive instant notification so they can react immediately to ensure maximum up-time. FSPs have a reserve of spare parts ready to get a PV system back up and running with one trip to site, and thanks to Fronius monitoring capabilities FSPs can also assist with upgrading to a customised battery solution.



- / Fastest service available
- / Protect your investment
- / Nationwide Fronius Solutions Partners
- / Remote system diagnosis
- / One-trip-to-site service
- / Future-proof system integration



## DC ISOLATOR

The integrated DC isolator is compliant with installation standard AS/NZS 5033\*. No additional DC isolator adjacent to the inverter is required, which saves time and cost.

\*Check the Fronius Australia website for technical datasheets outlining installation suitability.

# LIGHTER



## LIGHT WEIGHT

The Fronius SnapINverter range is up to 50% lighter than comparable inverters\*. This, in combination with the snap-in design, allows for quick & easy installation.

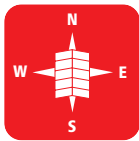
\*Findings from an internal study carried out June 2015.



- / Snap-in design is quick and easy to install
- / Installation can be performed by one person\*
- / Lower installation costs
- / Convenient, low-cost maintenance

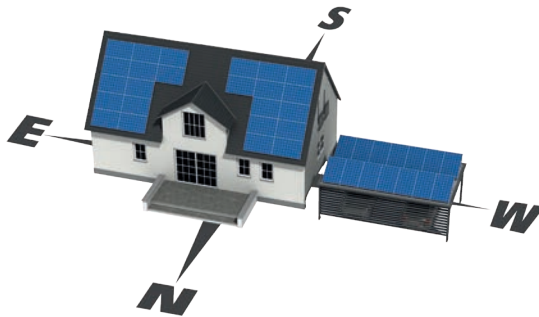
\*Please check work safety regulations.

# MORE FLEXIBLE



## SUPERFLEX TECHNOLOGY

Fronius SuperFlex technology makes designing a PV system easier than ever. The low starting and very broad voltage range of the two Maximum Power Point Tracker's (MPPT's) allows connection of highly asymmetric configurations. This enables the designer to solve most shading issues, including multiple orientated or partly shaded roofs. In some cases a 1:9 ratio between MPPT1 and MPPT2 is even possible.



- / High system design flexibility
- / Most module configurations can be used
- / Optimised performance for shading



## SOLAR BATTERY OPTIONS

Batteries can easily be added to any PV system that uses a Fronius SnapINverter, either in AC-coupled or DC-coupled system architecture\*. With this future-proof concept, Fronius ensures that every system is primed to integrate storage. Batteries can be added at any time, and to help decide which battery size to choose, Fronius Solar.web tracks energy usage\*\* and production.

\*Depending on which SnapINverter is chosen. \*\*Consumption monitoring with installation of additional Fronius Smart Meter.



## DYNAMIC PEAK MANAGER

Even in partially shaded conditions the Fronius Dynamic Peak Manager always finds the maximum output power, ensuring that the inverter is always operating at the point of maximum output. Get up to 4 per cent more yield from a system that has to contend with shade.

# THE FRONIUS SNAPINVERTER GENERATION

## SYMO

- / Unrivalled technology
- / The super flexible, 3-phase inverter for residential & commercial applications
- / 3.0 to 20.0 kW



## ECO

- / Project optimisation
- / The high power density, 3-phase inverter for large scale commercial
- / 25.0 to 27.0 kW



## FRONIUS SNAPINVERTER RANGE

## PRIMO

- / Optimised energy management
- / The optimal 1-phase inverter for self-consumption management
- / 3.0 to 8.2 kW



## SYMO HYBRID

- / The personal storage solution
- / The flexible, 3-phase inverter perfect for battery storage integration
- / 3.0 to 5.0 kW



## FRONIUS SNAPINVERTERS INTEGRATED FEATURES

Inbuilt features at a glance

	PRIMO	SYMO	ECO	SYMO HYBRID
Energy management function inbuilt	✓	✓	✓	✓
Multiple MPPTs	✓	✓	-	-
Extra broad MPPT voltage window	✓	✓	-	✓
Dynamic Peak Manager: Shading resistant MPPT	✓	✓	✓	✓
Suitable for installations under 600V DC	✓	✓	-	✓
Easy installation	✓	✓	✓	✓
DC isolator inbuilt	✓	✓	✓	✓
WLAN monitoring inbuilt	✓	✓	✓	✓
Remote monitoring	✓	✓	✓	✓
Hybrid functionality				✓
Smart Grid Ready	✓	✓	✓	✓
Proactive Service Ready	✓	✓	✓	✓
Galvanic Isolation	-	-	-	-

## FRONIUS SNAPINVERTER PERFORMANCE DATA

One generation for any application

	PRIMO	SYMO	ECO	SYMO HYBRID
AC Output power	3.0 – 8.2kVA	3.0 – 8.2kVA, 10.0 – 20.0kVA	25.0, 27.0kVA	3.0, 4.0, 5.0kVA
Technology	Transformerless	Transformerless	Transformerless	Transformerless
Number of phases	1	3	3	3
Max input voltage	1000V	1000V	1000V	1000V
Feed-in start voltage (U <sub>dc</sub> start)	80V	150V*, 200V*	580V	150V
Number of MPP trackers usable	2	1*, 2	1	1
MPP voltage range	80 – 800V	150 – 800V*, 200V – 800V*	580 – 850V	150 – 800V
Optimised tracking algorithm	Yes	Yes	No	Yes
Max efficiency	97.8%	98.1%	98.7%	97.6%
Degree of protection	IP 65	IP 65*, IP 66*	IP 66	IP 65
Weight	21.5 kg	16.0kg* - 43.4 kg*	35.7 kg	22.0 kg
Power factor	0.70 - 1 ind./cap.	0.70 - 1 ind./cap.* 0.0 - 1 ind./cap.*	0.0 - 1 ind./cap.	0.70 - 1 ind./cap.
Dimensions (h x w x d mm)	645 x 431 x 204	645 x 431 x 204*, 725 x 510 x 225*	725 x 510 x 225	645 x 431 x 204

\* Depends on specific inverter model. Please refer to specific datasheet for more information.

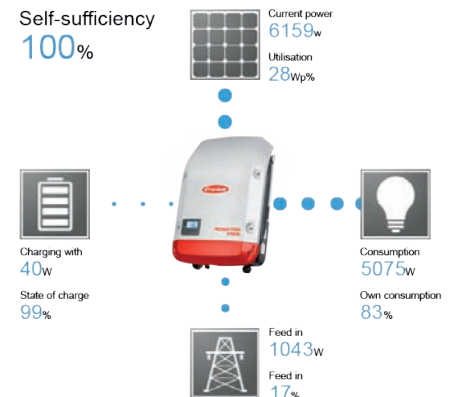
## ACCESSORIES AND SOLUTIONS

### FRONIUS SMART METER

Thanks to its monitoring capabilities, the Fronius Smart Meter plays a key role in making a PV system storage ready. Combined with Fronius Solar.web, the Fronius Smart Meter presents a clear overview of power consumption, feed-in and surplus energy, enabling improved energy management and giving accurate information on future battery requirements.

### SOLAR.WEB

PV systems can be monitored, analysed and compared quickly and easily using the Fronius Solar.web online portal. Up-to-date system data can be accessed at any time and is clearly presented via a user-friendly range of analysis functions. Solar.web is also a convenient platform for adjusting system configurations.



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### 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 3,800 employees worldwide and 1,242 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](http://www.fronius.com)

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