

Designed to monitor.

First measure, then optimize: Fronius Smart Meter

Visualize, control, and optimize energy flows: efficient energy management is only possible if the right data is available. And this is exactly what the Smart Meter – our bidirectional and intelligent electricity meter for photovoltaic systems – quickly, reliably, and accurately provides.

Fronius Smart Meter. Designed to monitor.

01 Data with added value

The basis for photovoltaic system optimization: our bidirectional Smart Meters measure all energy flows that come from the grid or flow into the grid, allowing them to gather valuable information quickly, reliably, and precisely. When used properly, the data has the real added value of money savings for photovoltaic system owners.

02 Savings included

Save money and energy over the long term: this is made possible by our Smart Meters as essential accessories in combination with the inverter and Fronius Solar.web, our online monitoring tool. Energy flows can be visualized, controlled, and therefore also optimized. This is how efficient energy management based on data works.

03 Ready for anything

Something for everyone: our variety of Smart Meter products covers the entire range of applications – whether for residential or commercial use.

Fronius Smart Meter WR*

The intelligent electricity meter with current transformer control.



			Fronius Smart Meter		
			WR 100-600 V-3		
Technical Data	Nominal voltage	V	120 - 600		
	Operating voltage range	%	-15 to +15		
	nominal frequency	Hz	45 - 65		
	maximum current	A	3 x 6,000		
	grid type		1PN, 2P, 2PN, 3P, 3PN		
	Power line cross section	mm ²	up to 2.5		
	Neutral line cross section	mm ²	up to 2.5		
	CT's & Communication line cross section	mm ²	up to 2.5		
	Power consumption	W	1.75		
	Starting current	mA	40		
	Accuracy class		0.5		
	Active energy accuracy		ANSI C12.20 class 0.5 and ANSI C12.1 accuracy		
	Mounting		Indoor: Wall-mounted; Outdoor: If mounted inside an electrical enclosure that is rated NEMA 3R or 4 / IP 66		
	Degree of protection		IP40		
	Ambient temperature range	°C	-40 to +80		
	Dimensions (height x width x depth)	mm	153 x 85.1 x 38.0 (6.02 in x 3.35 in x 1.50 in)		
	Weight	g	233		
	Interface to inverter		Modbus RTU (RS485)		
Certificates / listings		UL 61010-1, CAN/CSA-C22.2 No. 61010-1-04, IEC 61010-1, EN 61326: 2002, EN61000-4-2, EN61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11, FCC Part 15 Class B, EN 55022: 1994 Class B, ANSI C12.1-2014 Accuracy Class 1, ANSI C12.20-2015 Accuracy Class 0.5			
Current Transformers		Primary: 1 – 6,000 A / secondary: use only CTs with voltage output 333 mV			

* depending on country specific availability and certification

Current transformers for Fronius Smart Meters

Risk-free photovoltaic optimization: In large PV systems, high output current can no longer be recorded with Smart Meters that measure directly. The Fronius Smart Meter CT current transformer alters the current into a signal that is reliably measured and converted. Installing the Fronius Smart Meter CT is especially convenient. Thanks to the split-core technology, the current transformer can be placed around the conductor without having to disconnect the cable for installation.



			Fronius Smart Meter CT V		
			100A/333mV	250A/333mV	400A/333mV
Technical data	Compatible Fronius Smart Meters		Fronius Smart Meter WR 100-600 V-3 Fronius Smart Meter IP		
	Accuracy		1		
	Type of installation		Split-core		
	Dimensions (height x width x depth)	mm	46 x 31.5 x 31.5	66.5 x 45 x 34.4	81.5 x 57 x 38.4
	Diameter	mm	16	24	36
	Cable length	m	1		
	Temperature range	°C	-40 to +65		

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