

FRONIUS SYMO 10.0-3-M-OS



SnapInverter
Technologie



Integrated data
communication



SuperFlex
Design



Dynamic Peak
Manager



Smart Grid
Ready



Zero feed-in

Owing to the SuperFlex Design, the Fronius Symo is the perfect answer to irregularly shaped or multi-oriented roofs. The standard interface to the internet via WLAN or Ethernet and the ease of integration of third-party components make the Fronius Symo one of the most communicative inverters on the market. Furthermore, the meter interface permits dynamic feed-in management and a clear visualisation of the consumption overview. With the Fronius Symo OS 10 kW a PV system can be oversized up to 25 kWp.

TECHNICAL DATA FRONIUS SYMO 10.0-3-M-OS

INPUT DATA	SYMO 10.0-3-M-OS
Number MPP trackers	2
Max. input current ($I_{dc \max 1} / I_{dc \max 2}$)	27.0 A / 16.5 A ¹⁾
Max. input current ($I_{dc \max 1} + I_{dc \max 2}$)	43.5 A
Max. array short circuit current (MPP ₁ / MPP ₂)	40.5 A / 24.8 A
DC input voltage range ($U_{dc \min} - U_{dc \max}$)	200 - 900 V
Feed-in start voltage ($U_{dc \text{ start}}$)	200 V
Usable MPP voltage range	270 - 800 V
Number of DC connections	3+3
Max. PV generator output ($P_{dc \max}$)	25 kW _{peak}

OUTPUT DATA	SYMO 10.0-3-M-OS
AC nominal output ($P_{ac,r}$)	10,000 W
Max. output power	10,000 VA
AC output current ($I_{ac \text{ nom}}$)	14.4 A
Grid connection (voltage range)	3-NPE 400 V / 230 V oder 3-NPE 380 V / 220 V (+20 % / -30 %)
Frequency (Frequency range)	50 Hz / 60 Hz (45 - 65 Hz)
Total harmonic distortion	1.8 %
Power factor ($\cos \phi_{ac,r}$)	0 - 1 ind. / cap.

¹⁾ 14.0 A for voltages < 420 V

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

TECHNICAL DATA FRONIUS SYMO 10.0-3-M-OS

GENERAL DATA	SYMO 10.0-3-M-OS
Dimensions (height x width x depth)	725 x 510 x 225 mm
Weight	34.8 kg
Degree of protection	IP 66
Protection class	1
Overvoltage category (DC / AC) ²⁾	2 / 3
Night time consumption	< 1 W
Inverter design	Transformerless
Cooling	Regulated air cooling
Installation	Indoor and outdoor installation
Ambient temperature range	-40 - +60 °C
Permitted humidity	0 - 100 %
Max. altitude	2,000 m / 3,400 m (unrestricted / restricted voltage range)
DC connection technology	6x DC+ and 6x DC- screw terminals 2.5 - 16 mm ²
AC connection technology	5-pole AC screw terminals 2.5 - 16 mm ²
Certificates and compliance with standards	VDE 0126-1-1/A1, VDE AR N 4105, IEC 62109-1/-2

²⁾ According to IEC 62109-1. DIN rail for optional type 1 + 2 or type 2 surge protection device available.

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EFFICIENCY	SYMO 10.0-3-M-OS
Max. efficiency	98.0 %
European efficiency (η _{EU})	97.4 %
MPP adaptation efficiency	> 99.9 %

PROTECTIVE DEVICES	SYMO 10.0-3-M-OS
DC insulation measurement	Yes
Overload behaviour	Operating point shift, power limitation
DC disconnecter	Yes
Reverse polarity protection	Yes

INTERFACES	SYMO 10.0-3-M-OS
WLAN / Ethernet LAN	Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON)
6 inputs and 4 digital inputs/outputs	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⁾	S0-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 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

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