

# Fronius Symo Advanced 10.0-3-M

Product code: F.Fronius.3F.wifi.00100-M.Advanced



Manufacturer	<b>FRONIUS</b>
Inverter type	<b>On-grid</b>
Inverter phases	<b>3</b>
Max. AC power	<b>10000</b>
Output power	<b>10000</b>
Circuit breaker value	<b>20</b>
MPPT	<b>2</b>
Amperage	<b>27/16.5</b>
WIFI	<b>Tak</b>
Ethernet	<b>Yes</b>
Compatible optimizers	<b>Tigo</b>
Warranty	<b>10</b>
CN code number	<b>85044086</b>
Quantity per pallet	<b>10</b>
Country of origin	<b>Austria</b>
Weight	<b>35</b>
Width	<b>51</b>
Height	<b>75</b>
Depth	<b>23</b>

Enhanced security: The Fronius Symo Advanced opens a new chapter in the history of Fronius SnapInverters. This inverter combines proven performance with the latest safety technology. As a result, the Fronius Symo Advanced is a reliable choice regardless of the size of the industrial photovoltaic installation. The latest generation of inverters, available in various power classes from 10 to 20 kW, is equipped with Fronius Arc Guard technology, effectively protecting against electric arcs. The SuperFlex Design ensures full flexibility during roof installation planning, and the Dynamic Peak Manager guarantees maximum performance.

## Product variants

Index	Price
<b>Fronius Symo Advanced 10.0-3-M</b> F.Fronius.3F.wifi.00100-M.Advanced	Product prices only visible after login. If you do not have an account, please register.

## Product description

Enhanced security: The Fronius Symo Advanced opens a new chapter in the history of Fronius SnapINverters. This inverter combines proven performance with the latest safety technology. As a result, the Fronius Symo Advanced is a reliable choice regardless of the size of the industrial photovoltaic installation. The latest generation of inverters, available in various power classes from 10 to 20 kW, is equipped with Fronius Arc Guard technology, effectively protecting against electric arcs. The SuperFlex Design ensures full flexibility during roof installation planning, and the Dynamic Peak Manager guarantees maximum performance.

#### Technical data Fronius Symo Advanced 10.0-3-M:

##### Input data:

Number of MPP trackers: 2

Max. input current ( $I_{dc\ max}$ ): 27.0 / 16.5 A

Max. short-circuit current of module arrays\*: 55.7 / 34.0 A

DC input voltage range ( $U_{dc\ min}$  -  $U_{dc\ max}$ ): 200 - 1000 V

Startup voltage ( $U_{dc\ start}$ ): 200 V

Nominal input voltage ( $U_{dc,r}$ ): 600 V

MPP voltage range ( $U_{mpp\ min}$  -  $U_{mpp\ max}$ ): 270 - 800 V

Usable MPP voltage range: 200 - 800 V

Number of DC connections: 3 + 3

Max. photovoltaic generator power ( $P_{dc\ max}$ ): 15 kW<sub>peak</sub>

##### Output data:

AC nominal power ( $P_{ac,r}$ ): 10 kW

Max. output power ( $P_{ac\ max}$ ): 10 kVA

AC output current ( $I_{ac\ nom}$ ): 14.4 A

Grid connection ( $U_{ac,r}$ ): 3~ NPE 400/230, 3~ NPE 380/220 V

AC voltage range ( $U_{min}$  -  $U_{max}$ ): 150 - 280 V

Frequency ( $f_r$ ): 50 / 60 Hz

Frequency range ( $f_{min}$  -  $f_{max}$ ): 45 - 65 Hz

Non-linear distortion factor: <3% @ $P_{nom}$  (230/400VAC 50Hz)

Power factor ( $\cos\ \varphi_{ac,r}$ ): 0 - 1 ind./cap.

##### General data:

Dimensions / width: 510 mm

Dimensions (height): 725 mm

Dimensions (depth): 225 mm

Weight: 32.1 kg

Weight with packaging: 38.5 kg

Degree of protection: IP 66

Protection class: 1

Surge voltage category (DC/AC 1): 2 / 3

Nighttime energy consumption: < 1 W

Cooling: Regulated ventilation

Mounting: Indoor and outdoor installation

Ambient temperature range: -25°C - +60°C

Permissible air humidity: 0 - 100%

Max. height above sea level 2): 2,000 m / 3,400 m

DC connection technology: Screw terminals 6x DC+ and 6x DC- 2.5-16 mm<sup>2</sup>

AC connection technology: 5-pin screw terminals AC 2.5-16 mm<sup>2</sup>

##### Protection features:

- DC insulation measurement: Yes
- Behavior in case of overload: Shift of operating point, power limiter
- DC disconnect: Yes

- DC reverse polarity protection: Yes
- Electric arc detection - AFCI (Fronius Arc Guard): Yes

#### Main features Fronius Symo Advanced 10.0-3-M:

The new Fronius Arc Guard technology operates on the basis of recognition, reaction, and memory, effectively protecting against potentially dangerous electric arcs. Developed by Fronius, the advanced algorithm reliably identifies electric arcs, immediately shutting down the photovoltaic installation before a possible fire outbreak. The manufacturer continuously improves the Fronius Arc Guard function, aiming to increase sensitivity to electric arc detection and optimize the protection of the entire system.

Efficient design of complex roof installations becomes easier with innovative SuperFlex Design. Thanks to this feature, photovoltaic modules can be arranged in various directions, connecting very flexibly. The Fronius Symo Advanced allows processing a wide range of input voltages and supports very high currents generated by photovoltaic modules. With the Dynamic Peak Manager system, the Fronius Symo Advanced inverter achieves maximum performance, even if some photovoltaic modules are shaded. Intelligent shading management through built-in software eliminates the need for additional components and is ready for use immediately after installation.

Fronius products come with a two-year factory warranty, which can be extended free of charge to 5 years through simple registration on the Fronius Solar.web portal.

Registering the inverter on Solar.web offers numerous benefits, including:

- Warranty protection for up to 7 years for registered products.
- Free monitoring of photovoltaic system performance on the Fronius Solar.web portal.
- Regular information on new features, accessories, compatible batteries, and home automation solutions.