



Designed to rely on.

Product advantages

- 01 More safety included
- 02 Endless freedom
- 03 Optimal performance as standard

The Fronius Symo Advanced impresses not only with levels of performance and flexibility that have been proven a million times over, but also with its new equipment. The highlight in terms of safety is the integrated Fronius Arc Guard technology, which ensures the Fronius Symo Advanced exceeds the highest standards and is the future-proof and reliable choice for commercial photovoltaic systems of any size.

Fronius Symo Advanced. Designed to rely on.

Further developed with safety in mind:

the Fronius Symo Advanced opens the next chapter in the Fronius SnapINverter portfolio. Proven performance meets new safety technology, making the Fronius Symo Advanced more than ever a future-proof choice for installers and their customers.

01 More safety included

Detect, intervene, learn – the new Fronius Arc Guard technology follows this principle to protect against dangerous arcs. This algorithm developed by Fronius reliably detects arcs and switches the photovoltaic system off before a fire can occur. The Fronius Arc Guard is being continuously trained by the manufacturer to make the Arc Fault Circuit Interrupter more precise and to optimise system protection.

02 Endless freedom

Easily plan complex roofs thanks to the SuperFlex Design. The PV modules can be flexibly aligned and connected as the Fronius Symo Advanced is able to handle a wide range of input voltages as well as very high PV module currents.

03 Optimal performance as standard

Maximum yield even when the PV modules are partially in the shade is possible thanks to the Dynamic Peak Manager feature of the Fronius Symo Advanced. The intelligent software-based shade management tool is installed as standard and requires no additional components.

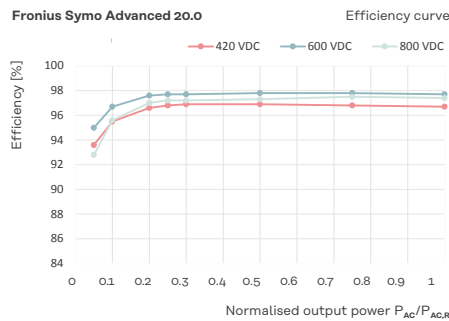
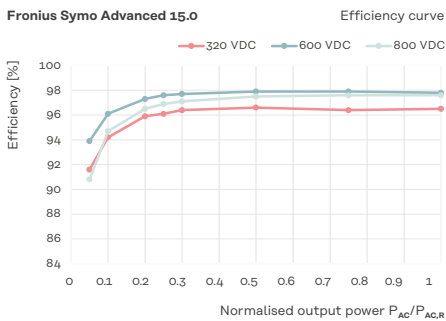


Fronius Symo Advanced

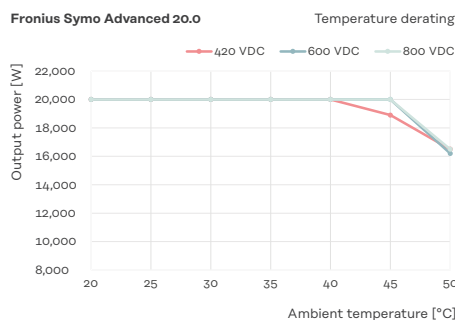
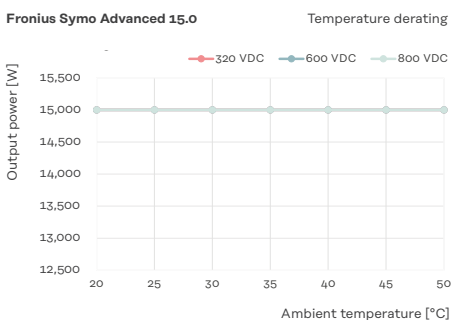
Impressive power data

The Fronius Symo Advanced impresses with flexible system design and the highest safety standards.

Efficiency



Power derating



Technical data

10.0 / 12.5 / 15.0 kW

| | | | Symo Advanced | | | | | |
|--|--|---|--|-------------------|-------------------|-------------------|-------------------|----------|
| | | | 10.0-3-M | | 12.5-3-M | | 15.0-3-M | |
| Input data | Number of MPP trackers | | 2 | | 2 | | 2 | |
| | | | MPPT1 | MPPT2 | MPPT1 | MPPT2 | MPPT1 | MPPT2 |
| | Max. input current ($I_{dc\ max}$) | A | 27.0 | 16.5 ¹ | 27.0 | 16.5 ¹ | 33.0 | 27.0 |
| | Max. usable input current ($I_{dc\ max\ MPPT\ 1+2}$) | A | 43.5 | | 43.5 | | 51.0 | |
| | | | MPPT1 | MPPT2 | MPPT1 | MPPT2 | MPPT1 | MPPT2 |
| | Max. array short circuit current MPPT1/MPPT2 ($I_{sc\ pv}$) ² | A | 55.7 | 34 | 55.7 | 34 | 68 | 55.7 |
| | DC input voltage range ($U_{dc\ min} - U_{dc\ max}$) | V | 200 - 1000 | | 200 - 1000 | | 200 - 1000 | |
| | Feed-in start-up input voltage ($U_{dc\ start}$) | V | 200 | | 200 | | 200 | |
| | Usable MPP voltage range | V | 200 - 800 | | 200 - 800 | | 200 - 800 | |
| | MPP Voltage range (at rated power) ($U_{mpp\ min} - U_{mpp\ max}$) | V | 270 - 800 | | 320 - 800 | | 320 - 800 | |
| | | | MPPT1 | MPPT2 | MPPT1 | MPPT2 | MPPT1 | MPPT2 |
| | Number of DC connections | | 3 | 3 | 3 | 3 | 3 | 3 |
| Max. PV generator output ($I_{dc\ max}$) | Wpeak | 15,000 | | 18,800 | | 22,500 | | |
| Output data | AC nominal output ($P_{ac,r}$) | W | 10,000 | | 12,500 | | 15,000 | |
| | AC nominal output ($P_{ac,r}$) | VA | 10,000 | | 12,500 | | 15,000 | |
| | | | 380 V AC | 400 V AC | 380 V AC | 400 V AC | 380 V AC | 400 V AC |
| | AC output current ($I_{ac\ nom}$) | A | 15.2 | 14.4 | 18.9 | 18 | 22.7 | 21.7 |
| | Grid connection (voltage range) | | 3-NPE 400 V / 230 V or 3-NPE 380 V / 220 V (+20 % / -30 %) | | | | | |
| | Frequency (frequency range) | Hz | 50 / 60 (45 - 65) | | 50 / 60 (45 - 65) | | 50 / 60 (45 - 65) | |
| | Total harmonic distortion | % | < 1.75 | | < 2.0 | | < 1.5 | |
| | Power factor ($\cos\ \varphi_{ac,r}$) | | 0-1 ind. / cap. | | | | | |
| General data | Dimensions (height x width x depth) | mm | 725 x 510 x 225 | | | | | |
| | Weight (inverter/with packaging) | kg | 35.4 / 38.4 | | 35.4 / 38.4 | | 41.96 / 44.96 | |
| | Protection class | | IP 66 | | IP 66 | | IP 66 | |
| | Safety class | | 1 | | 1 | | 1 | |
| | | | DC | AC | DC | AC | DC | AC |
| | Overvoltage category (DC/AC) ³ | | 2 | 3 | 2 | 3 | 2 | 3 |
| | Night-time consumption | W | <1 | | <1 | | <1 | |
| | Inverter concept | | Transformerless | | | | | |
| | Cooling | | Active Cooling Technology | | | | | |
| | Installation | | Indoor and outdoor installation | | | | | |
| | Ambient temperature range | °C | -25 - +60 | | -25 - +60 | | -25 - +60 | |
| | Permissible humidity | % | 0 - 100 | | 0 - 100 | | 0 - 100 | |
| | | | unrestricted / restricted voltage range | | | | | |
| | Max. altitude | m | 2,000/3,400 | | 2,000/3,400 | | 2,000/3,400 | |
| | DC connection technology | mm ² | 6x DC+ and 6x DC screw terminals 2.5 - 16 mm ² | | | | | |
| | AC connection technology | mm ² | 5-pin AC screw terminals 2.5 - 16mm ² | | | | | |
| Certificates and compliance with standards | | IEC 62109-1/-2, IEC 62116, IEC 61727, VDE 0126-1-1/A1, VDE AR-N 4105, G98/1, G99/1, AS/NZS 4777.2, UNE 206007-1, CEI 0-21, CEI 0-16, NRS 097-2-1, TOR Erzeuger Typ A, VDE AR-N 4110, EN 50549-1/-2, IEC 61683, IEC60068, IEC 63027:2023 | | | | | | |
| Country of manufacture | | Austria | | | | | | |

¹ 14.0 A at voltages < 420 V

² $I_{sc\ pv} = I_{sc\ max} \geq I_{sc} (STC) \times 1.25$ according to e.g. IEC 60364-7-712, NEC 2020, AS/NZS 5033:2021.

³ In line with IEC 62109-1. DIN rail for optional surge protective device type 1 + 2 or type 2 present.

For further information on the availability of the inverters in your country, please visit www.fronius.com.

| | | | Symo Advanced | | |
|--------------------|--|---|--|----------|----------|
| | | | 10.0-3-M | 12.5-3-M | 15.0-3-M |
| Efficiency | Maximum efficiency | % | 97.8 | 97.8 | 97.9 |
| | European efficiency (η_{EU}) | % | 97.1 | 97.4 | 97.6 |
| | MPP adjustment efficiency | % | > 99.9 | > 99.9 | > 99.9 |
| Protection devices | Arc Fault Circuit Interrupter - AFCI (Fronius Arc Guard) | | Integrated | | |
| | DC isolation measurement | | Integrated | | |
| | Overload performance | | Operating point adjustment, power limitation | | |
| | DC disconnect | | Integrated | | |
| | Reverse polarity protection | | Integrated | | |
| | RCMU | | Integrated | | |
| Interfaces | Wireless / Ethernet LAN | | Fronius Solarweb, Modbus TCP SunSpec, Fronius Solar API (JSON) | | |
| | 6 inputs and 4 digital inputs/outputs | | Interface to ripple control receiver | | |
| | USB (type A socket) ⁴ | | Data logging, inverter update via USB flash drive | | |
| | 2x RS422 (RJ45 socket) ⁴ | | Fronius Solar Net | | |
| | Message output ⁴ | | Energy management (potential-free relay output) | | |
| | Datalogger and web server | | Integrated | | |
| | External input ⁴ | | So-Meter Interface / Input for overvoltage protection | | |
| | RS485 | | Modbus RTU SunSpec or meter connection | | |

⁴ Also available in a light version.

Technical data

17.5 / 20.0 kW

| | | | Symo Advanced | | | |
|--|--|-----------------|---|---------------------|---------------------|---------------------|
| | | | 17.5-3-M | | 20.0-3-M | |
| Input data | Number of MPP trackers | | 2 | | 2 | |
| | | | MPPT1 | MPPT2 | MPPT1 | MPPT2 |
| | Max. input current ($I_{dc\ max}$) | A | 33.0 | 27.0 | 33.0 | 27.0 |
| | Max. usable input current ($I_{dc\ max\ MPPT\ 1+2}$) | A | 51.0 | | 51.0 | |
| | | | MPPT1 | MPPT2 | MPPT1 | MPPT2 |
| | Max. array short circuit current MPPT1/MPPT2 ($I_{sc\ pv}$) ² | A | 68 | 55.7 | 68 | 55.7 |
| | DC input voltage range ($U_{dc\ min} - U_{dc\ max}$) | V | 200 - 1000 | | 200 - 1000 | |
| | Feed-in start-up input voltage ($U_{dc\ start}$) | V | 200 | | 200 | |
| | Usable MPP voltage range | V | 200 - 800 | | 200 - 800 | |
| | MPP Voltage range (at rated power) ($U_{mpp\ min} - U_{mpp\ max}$) | V | 370 - 800 | | 420 - 800 | |
| | | | MPPT1 | MPPT2 | MPPT1 | MPPT2 |
| | Number of DC connections | | 3 | 3 | 3 | 3 |
| Max. PV generator output ($I_{dc\ max}$) | W_{peak} | 26,300 | | 30,000 | | |
| Output data | AC nominal output ($P_{ac,r}$) | W | 17,500 | | 20,000 | |
| | AC nominal output ($P_{ac,r}$) | VA | 17,500 | | 20,000 | |
| | | | 380 V _{AC} | 400 V _{AC} | 380 V _{AC} | 400 V _{AC} |
| | AC output current ($I_{ac\ nom}$) | A | 26.5 | 25.3 | 30.3 | 28.9 |
| | Grid connection (voltage range) | | 3-NPE 400 V / 230 V or 3-NPE 380 V / 220 V (+20 % / -30 %) | | | |
| | Frequency (frequency range) | Hz | 50 / 60 (45 - 65) | | 50 / 60 (45 - 65) | |
| | Total harmonic distortion | % | < 1.5 | | < 1.25 | |
| | Power factor ($\cos\ \varphi_{ac,r}$) | | 0–1 ind. / cap. | | | |
| General data | Dimensions (height x width x depth) | mm | 725 x 510 x 225 | | | |
| | Weight (inverter/with packaging) | kg | 41.96 / 44.96 | | 41.96 / 44.96 | |
| | Protection class | | IP 66 | | IP 66 | |
| | Safety class | | 1 | | 1 | |
| | | | DC | AC | DC | AC |
| | Overvoltage category (DC/AC) ³ | | 2 | 3 | 2 | 3 |
| | Night-time consumption | W | <1 | | <1 | |
| | Inverter concept | | Transformerless | | | |
| | Cooling | | Active Cooling Technology | | | |
| | Installation | | Indoor and outdoor installation | | | |
| | Ambient temperature range | °C | -25 - +60 | | -25 - +60 | |
| | Permissible humidity | % | 0 - 100 | | 0 - 100 | |
| | | | unrestricted / restricted voltage range | | | |
| | Max. altitude | m | 2,000/3,400 | | 2,000/3,400 | |
| | DC connection technology | mm ² | 6x DC+ and 6x DC screw terminals 2.5 - 16 mm ² | | | |
| | AC connection technology | mm ² | 5-pin AC screw terminals 2.5 - 16mm ² | | | |
| | Certificates and compliance with standards | | IEC 62109-1/-2, IEC 62116, IEC 61727, VDE 0126-1-1/A1, VDE AR-N 4105, G98/1, G99/1, AS/NZS 4777.2, UNE 206007-1, CEI 0-21, CEI 0-16, NRS 097-2-1, TOR Erzeuger Typ A, VDE AR-N 4110, EN 50549-1/-2, IEC 61683, IEC60068, IEC 63027:2023 | | | |
| Country of manufacture | | Austria | | | | |

² $I_{sc\ pv} = I_{sc\ max} \geq I_{sc\ (STC)} \times 1.25$ according to e.g. IEC 60364-7-712, NEC 2020, AS/NZS 5033:2021.

³ In line with IEC 62109-1. DIN rail for optional surge protective device type 1 + 2 or type 2 present.

For further information on the availability of the inverters in your country, please visit www.fronius.com.

Fronius Symo Advanced. Designed to rely on.

| | | | Symo Advanced | |
|--------------------|--|---|---|----------|
| | | | 17.5-3-M | 20.0-3-M |
| Efficiency | Maximum efficiency | % | 97.9 | 97.9 |
| | European efficiency (η_{EU}) | % | 97.6 | 97.6 |
| | MPP adjustment efficiency | % | > 99.9 | > 99.9 |
| Protection devices | Arc Fault Circuit Interrupter - AFCI (Fronius Arc Guard) | | Integrated | |
| | DC isolation measurement | | Integrated | |
| | Overload performance | | Operating point adjustment, power limitation | |
| | DC disconnect | | Integrated | |
| | Reverse polarity protection | | Integrated | |
| | RCMU | | Integrated | |
| Interfaces | Wireless / 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 (type A socket) ⁴ | | Data logging, inverter update via USB flash drive | |
| | 2x RS422 (RJ45 socket) ⁴ | | Fronius Solar Net | |
| | Message output ⁴ | | Energy management (potential-free relay output) | |
| | Datalogger and web server | | Integrated | |
| | External input ⁴ | | SO-Meter Interface / Input for overvoltage protection | |
| | RS485 | | Modbus RTU SunSpec or meter connection | |

⁴ Also available in a light version.

Further information: www.fronius.com/commercial-inverters

EN_UK_V03_Jun 2023
Text and illustrations were accurate at the time of printing. Fronius reserves the right to make changes. All information published in this document, despite exercising the greatest of care in its preparation, is subject to change. No legal liability is accepted. Copyright © 2023 Fronius™. All rights reserved.

Fronius UK Limited
Maidstone Road, Kingston
Milton Keynes, MK10 0BD
United Kingdom
pv-sales-uk@fronius.com
www.fronius.co.uk

Fronius Canada Ltd.
2875 Argentia Road, Units 4, 5 & 6
Mississauga, ON L5N 8G6
Canada
pv-sales-canada@fronius.com
www.fronius.ca

Fronius Australia Pty Ltd.
90-92 Lambeck Drive
Tullamarine VIC 3043
Australia
pv-sales-australia@fronius.com
www.fronius.com.au

Fronius International GmbH
Froniusplatz 1
4600 Wels
Austria
pv-sales@fronius.com
www.fronius.com