Designed to rely on.

Product advantages

01 More safety features 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.

Developed with safety in mind:

The Fronius Symo Advanced opens the next chapter in the Fronius SnapINverter portfolio. Performance proven a million times over meets new safety technology, making the Fronius Symo Advanced more than ever a future-proof choice for installers and their customers.

01 More safety features included

Detect, intervene, learn – the new Fronius Arc Guard technology follows this principle to protect against dangerous arcs. The algorithm developed by Fronius reliably detects arcing and shuts down the photovoltaic system 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 optimize system protection.

02 Endless freedom

Easily plan complex roofs thanks to 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

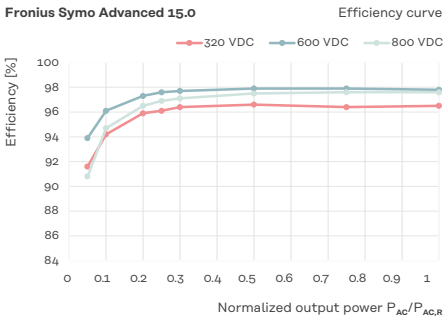
Maximum yield even when the PV modules are partially in the shade is possible thanks to the Dynamic Peak Manager feature of the Fronius Symo Advanced. The intelligent software-based shade management tool is installed as standard and requires no additional components.

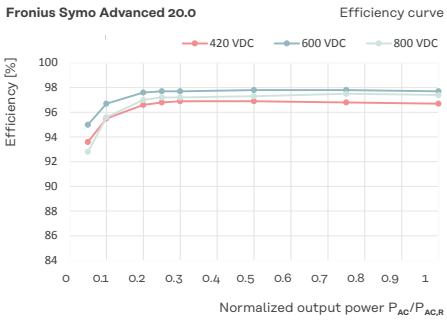
Fronius Symo Advanced

Impressive power data

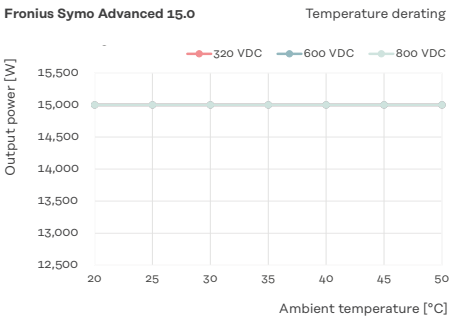
The Fronius Symo Advanced impresses with its flexible system design and the highest safety standards.

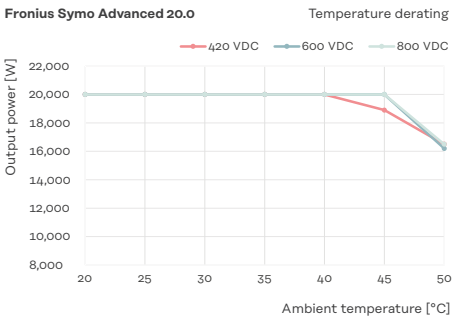
Efficiency





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	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 ($P_{dc\ max}$)	kWp	15,000		18,800		22,500	
Output data	AC nominal output ($P_{ac,r}$)	W	10,000		12,500		15,000	
	Max. output power / rated apparent power	VA	10,000		12,500		15,000	
			380 VAC	400 VAC	380 VAC	400 VAC	380 VAC	400 VAC
	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 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 above sea level	m	2,000/3,400		2,000/3,400		2,000/3,400	
	DC connection technology	mm²	6x DC+ and 6x DC screw terminals 2.5 - 16 mm²					
	AC connection technology	mm²	5-pin AC screw terminals 2.5 - 16mm2					
	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					
	Country of manufacture		Austria					

[1] *14.0 A at voltages < 420 V*
[2] *Isc pv = Isc max. ≥ Isc (STC) x 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 protection 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	Max. efficiency	%	97.8	97.8	97.9
	Europ. efficiency (ηEU)	%	97.1	97.4	97.6
	MPP adaptation 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 shift, power limiter		
	DC disconnector		Integrated		
	Reverse polarity protection		Integrated		
	RCMU		Integrated		
Interfaces	WLAN / Ethernet LAN		Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON)		
	6 inputs and 4 digital inputs/outputs		Connection to ripple control receiver		
	USB (type A socket)[4]		Datalogging, inverter updating using a USB thumb 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]		S0-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	370–800		420–800	
			MPPT1	MPPT2	MPPT1	MPPT2
	Number of DC connections		3	3	3	3
	Max. PV generator output ($P_{dc\ max}$)	kWp	26,300		30,000	
Output data	AC nominal output ($P_{ac,r}$)	W	17,500		20,000	
	Max. output power / rated apparent power	VA	17,500		20,000	
			380 VAC	400 VAC	380 VAC	400 VAC
	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 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 above sea level	m	2,000/3,400		2,000/3,400	
	DC connection technology	mm²	6x DC+ and 6x DC screw terminals 2.5 - 16 mm²			
	AC connection technology	mm²	5-pin AC screw terminals 2.5 - 16mm2			
	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			
	Country of manufacture		Austria			

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			Symo Advanced	
			17.5-3-M	20.0-3-M
Efficiency	Max. efficiency	%	97.9	97.9
	Europ. efficiency (ηEU)	%	97.6	97.6
	MPP adaptation efficiency	%	> 99.9	> 99.9

Protection devices	Arc Fault Circuit Interrupter - AFCI (Fronius Arc Guard)		Integrated
	DC isolation measurement		Integrated
	Overload performance		Operating point shift, power limiter
	DC disconnector		Integrated
	Reverse polarity protection		Integrated
	RCMU		Integrated

Interfaces	WLAN / Ethernet LAN		Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON)
	6 inputs and 4 digital inputs/outputs		Connection to ripple control receiver
	USB (type A socket)[4]		Datalogging, inverter updating using a USB thumb drive
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	Message output[4]		Energy management (potential-free relay output)
	Datalogger and web server		Integrated
	External input[4]		S0-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

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