

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 ($P_{dc\ max}$)	W_{peak}	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 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 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	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 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.

Fronius Symo Advanced. Designed to rely on.

			Symo Advanced	
			17.5-3-M	20.0-3-M
Efficiency	Max. efficiency	%	97.9	97.9
	Europ. efficiency (η_{EU})	%	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 disconnecter		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		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

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