Technical Data
SINVERT PVM13

SIEMENS

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The solar inverter SINVERT PVM13 is used in PV systems to convert the direct current from the PV generators into a three-phase current. The three-phase current is then supplied to the connected power grid. The inverter design is optimized for the lowest possible energy losses and thus the highest possible efficiency. Due to the EMC approved design the inverter is suitable for operation in areas susceptible to electromagnetic disturbance.

The system is provided with standardized interfaces so that it can be integrated into a control system or an existing installation.

Special features:

- Optimized for high efficiency
- Compact design, very easy to install
- Integrated graphical operator panel

Output side (AC)		
Rated grid voltage $U_{ac,r}$	V	3AC 400
Grid voltage U_{ac} [1)]	V	0.8 $U_{ac,r}$ ... 1.2 $U_{ac,r}$
Rated frequency f_r	Hz	50
Grid frequency f [1)]	Hz	0.95 f_r ... 1.02 f_r
Rated power $P_{ac,r}$	kW	12.4 (at DC 600 V / cos phi 1)
Maximum output power $P_{ac,max}$	kW	12.4
Maximum output current $I_{ac,max}$	A	18
cos phi (at $P_{ac,r}$)		1 (0.9i ... 0.9c)
THD I (at $P_{ac,r}$)	%	< 2.5
Grid configuration		TN-S
Network protection	A	32 (Type B)
Surge protection (internal)		Type 3
Input side (DC)		
MPP voltage range $U_{mpp,min}$ ... $U_{mpp,max}$	V	420 ... 850
Start-up input voltage $U_{dc,start}$	V	350
Maximum input voltage $U_{dc,max}$	V	1000
Maximum voltage for operation $U_{dc,op}$	V	950
Minimum voltage for operation $U_{dc,min}$	V	350
Rated input power $P_{dc,r}$	kW	12.6 (at DC 600 V)
Maximum input current $I_{dc,max}$	A	30
Number of DC inputs		4
Maximum current per DC input	A	25
DC disconnection switch		built-in
Surge protection (internal)		Type 3
Efficiency		
European weighted efficiency (Euro eta)	%	97.5
Maximum efficiency	%	98.0
Night-time power losses	W	0.5
Minimum DC power for operation	W	60
Dimensions and weight		
Width	mm	530
Height	mm	601
Depth	mm	270
Weight	kg	40

[1)] The given values describe the technical characteristics of the device. The locally applicable limits for the grid monitoring function are set during commissioning at the device itself. Those values may differ from the above stated values.

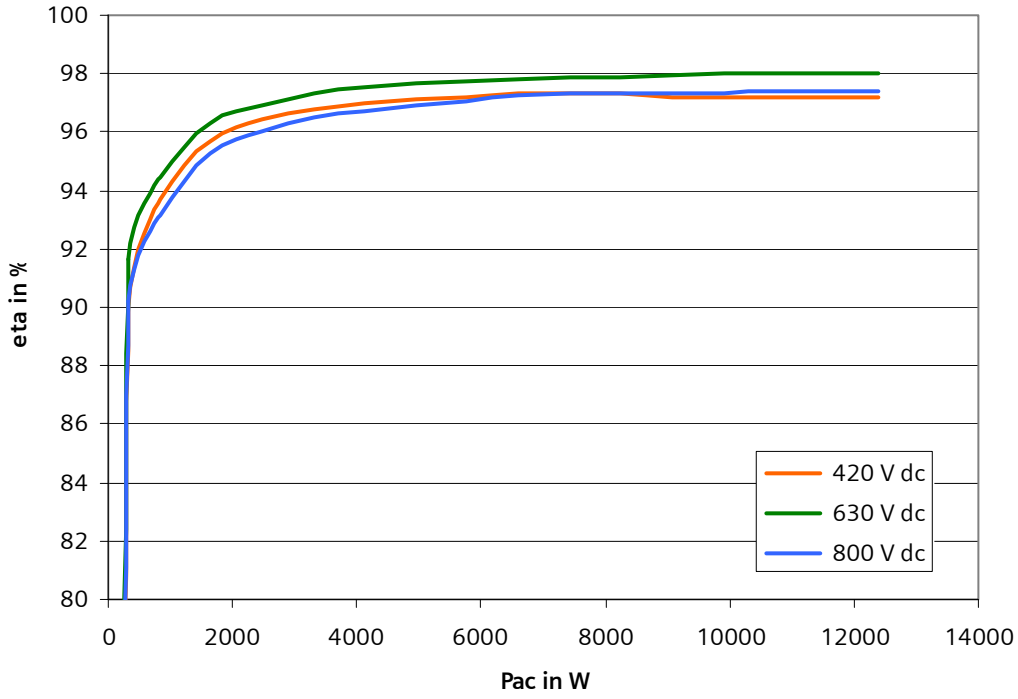
General technical specifications		
Galvanic isolation		N/A (transformerless topology)
Noise level	dB(A)	< 45
Maximum altitude for operation (without derating)	m	2000
Installation		suitable for outdoor installation
Mounting method		wall fastening (wall mounted frame included)
Cooling method		natural convection
Colour		RAL 7035 (light grey)
Climatic conditions		
Ambient temperature for operation	°C	-25 ... 55
Ambient temperature for storage and operation	°C	-25 ... 70
Maximum temperature for maximum power	°C	50
Relative humidity	%	4 ... 100
Other climatic conditions		4K4H (EN 60721-3-4)
Applicable standards and conformity		
Conformity		CE
Grid monitoring (ENS)		VDE 0126-1-1
Safety		EN 50178
EMC immunity		EN 61000-6-2
EMC emission		EN 61000-6-4
Harmonics		EN 61000-3-12
Flicker		EN 61000-3-11
Degree of protection		IP65 (EN 60529)
Protection class		I
Connectors		
Input DC		connector MC4 (not included)
Output AC [2)]		connector (included) max. 6 mm² finely stranded max. 18 mm outer cable diameter
Communication Ethernet		connector (included)
Communication RS485		connector (included, 2 pieces)
Irradiation sensor		connector (included)
Relay output for faults		connector (included)

2) A connector suitable for a maximum cable size of 10 mm² and a maximum outer cable diameter of 24 mm is available as an option.

Operator panel

Display type		graphical (with backlight)
Display resolution	pixel	128 x 64
Operation		membrane keypad, 8 keys

Efficiency curve



Ordering information

Order number (MLFB)	6AG3120-3JE02-0AC0