

### SINVERT 1700 MS

#### Description:

Power conditioning unit with three-phase output for grid parallel operation; consisting of IGBT inverter, DC/AC distribution, isolating transformer and SIMATIC S7 controller; MPP tracking for optimum utilisation of PV field power; VAR control in three-phase network (optional); integrated control panel with display of operating states and actual values; manual/automatic switch-over by integrated key-switch; isolation monitoring with selective fault allocation and safety disconnection; visualization and service software PowerProtect solar; interface for process visualization and integration in management systems via Ethernet (optional), for example for WinCC; Data logger with mini webserver (optional); cabinets for floor mounting; forced ventilation by fan; air intake at lower front and through bottom; air discharge through the cabinet roof; cable entry at base from below. According to standards VDE 0160, EN 50178, IEC 62103.

#### Technical data:

Grid interface	3~ 230/400 V; 50 Hz	(60 Hz optional)
Rated output power (AC)	1608 kVA	(at 450 V DC, 35 °C, cos phi = 1)
Max permanent output power (AC)	1740 kVA	(at 470 V DC, 30 °C, cos phi = 1)
Rated output current (AC)	2332 A	
Maximum output current (AC)	2520 A	
MPP voltage range (DC)	450 - 750 V	
Maximum system voltage (DC)	900 V	(no inverter operation)
Maximum operation voltage (DC)	820 V	
Rated input power (DC)	1680 kW	
Maximum input power (DC)	1860 kW	(at 470 V DC)
Rated input current (DC)	3692 A	
Maximum input current (DC)	4088 A	
Number of DC inputs	16	
Maximum current per DC input	250 A	
Eta at 100% P	96 %	
Eta at 75% P	96 %	
Eta at 50% P	96 %	
Eta at 25% P	96 %	
Eta at 10% P	96 %	
Power consumption at night	45 W	
Max. current auxiliary power (AC)	8 A (optional)	(per machine)
Number of machines	4	
Dimension (H x W x D)	2002 x 2718 x 834 mm	(per machine)
Weight	2540 kg	(per machine)
Colour	light grey (RAL 7035)	
Temperature range	0 - 50 °C	(up to 1000 m above sea level)
Air consumption	6000 m <sup>3</sup> /h	(per machine)
Humidity rating	EN 60721-3-3 (3K3)	
Degree of protection	IP 20	(IP 21 optional)
Noise level	< 80 dB (A)	(per machine)
EMC - immunity	EN 61000-6-2 (A)	
EMC - emission	EN 61000-6-4 (A)	
Harmonics	EN 61000-3-4; DIN VDE 0838 Part 2	

#### Annotation:

The inverter works like an active harmonic filter, this means power quality of the grid voltage is improved. Maximum current THD < 3 % (at nominal power and grid voltage THD < 2 %).