



## SPV inverter ratings and data

### Ratings

SPV			300	600	900	1200	1500	1800	2100	2400	2700
AC current	A		300	600	900	1200	1500	1800	2100	2400	2700
DC current	A		350	700	1050	1400	1750	2100	2450	2800	3150
Inverter apparent power @ 340 Vac	kVA		175	350	530	700	880	1060	1230	1410	1590
Euro efficiency	%		97.6	97.9	98.0	98.0	98.0	98.0	98.0	98.0	98.0
Turn on / off power	W		<900	<900	<900	<900	<900	<900	<900	<900	<900
Dimensions (single part inverter)	Width <sup>4</sup>	mm	2000 <sup>3</sup>	2000	2400	2800	3200	3600	4000	4400	4800
	Height <sup>2</sup>	mm	2000	2000	2000	2000	2000	2000	2000	2000	2000
	Depth	mm	600	1000	1000	1000	1000	1000	1000	1000	1000
Weight	kg		1200	1800	2300	2800	3300	3800	4300	4800	5300
Maximum no. of fused DC landing points			2	6	9	12	15	18	21	24	27
Quantity of parallel inverter modules			1	2	3	4	5	6	7	8	9

<sup>1</sup> Calculated without auxiliaries @ 340 Vac, 511 Vdc

<sup>2</sup> Height does not include 100 mm or 200 mm plinths

<sup>3</sup> Width will increase by 400 mm if 1000 V turn-on option selected

<sup>4</sup> Width may vary depending on which options are selected



#### Proven success

Project:	Kloster Veßra
Plant rating:	2.2 MW
Country:	Germany



#### Proven success

Plant rating:	8 MW
Country:	Thailand
Inverter type:	6 x SPV2400



## Conformance and safety

Grid compatibility	BDEW2008 (independently certified by TÜV Nord), IEEE1547, FERC 661, Arrêté du 23 avril 2008, ERDF-NOI-RES 13E Version 2, CEI – 016 as part of the complete installation, RD1663, RD661, G59/2, VDE0126-1-1, PO 12.3, PEA (2012).
Conformity	CE, IEC62116, Japan ready, EN50274 (IP20 variant). UL1741 compliant product data available on request.
EMC	Immunity - IEC 61000-6-2   Emissions – IEC 61000-6-4
AC side grounding	Ungrounded floating system (IT)
DC side grounding	Floating, positive or negative
AC side overvoltage category	Category III per IEC 60664-1
DC side overvoltage category	Category III per IEC 60664-1
DC side over-current protection	Fuses, mcbs or no protection. Consult Emerson to ensure correct configuration and protection of the inverter
DC Side Surge Protection	Class 1 per IEC 62103 and IEC 61140, DC side surge protection conforms to IEC 61643-11

## Specifications

Frequency	Hz	50-60
AC voltage range	Vac	260 - 400 Vac dependent on minimum DC voltage
MPPT range	Vdc	400-800, AC voltage dependent
Maximum DC turn-on voltage (standard)	Vdc	825
Maximum DC turn-on voltage (optional)	Vdc	1000
Power factor		Fully controllable (priority given to reactive current provision)
Power factor control		External control via digital interface or communications bus
Total harmonic current distortion, ITHD (typical)	%	2.28
Standby (night time) losses	W	<100
Minimum turn-on / turn-off power	W	900 all models
Operating temperature range	°C	0 to 50 (with derating of 1 %/°C required between 45 and 50 °C). IP20 products derate at 1 %/°C from 40 to 45 °C. Consult Emerson for further information
Storage temperature range	°C	-20 to 50
Altitude	m	Up to 3000. Above 1000 m consult Emerson for further information
Humidity	%	5-95 non condensing