

Single - Phase Grid Tie Inverter

1 Kw - 6 Kw

Technical Datasheet



CAPACITY (KW)	1	2	3	3.4	3.6	4.0	4.2	4.7	5	5.4	6
MODEL NUMBER	VS-101S	VS-201S	VS-301S	VS-341S	VS-361S	VS-422S	VS-422S	VS-471S	VS-502S	VS-542S	VS-601S
INPUT (DC)											
Max. DC input power (KW)	1.1	2.2	3.3	3.7	3.9	4.4	4.6	5.1	5.5	5.9	6.6
Max. DC I/P (Vdc)	550Vdc										
Max. MPPT I/P Current (A)	13A										
MPPT Short Circuit Current (A)	20A										
MPPT Tracking Voltage (Vdc)	70-500V						80-500V				
Min. Start Voltage (V)	80Vdc										
Number of MPPT Tracker	1						2				
Strings per MPPT Tracker	1										
OUTPUT (AC)											
Rated output power (KW)	1	2	3	3.4	3.6	4.0	4.2	4.7	5	5.4	6
Rated Grid Voltage (V) / Range	230V (140-285V)						230V (170 - 285V)				
Rated Grid freq. (Hz) / Range	50Hz (±5%)										
Rated output current AC (A)	4.7	9.4	14.1	15.5	18.8	18.8	19.8	20.5	23.5	25.5	28.2
AC Connection	P+N+PE										
THDI (%)	<3%										
Output power factor	0.8 leading to 0.8 lagging										
EFFICIENCY											
Max. conversion Efficiency (%)	97.3						97.5				
Max. Euro Efficiency (%)	97.1						97.3				
MPPT Efficiency (%)	>99										
PROTECTION											
Anti-islanding Protection	YES										
DC Reverse Polarity Protection	YES										
Insulation Resistance Protection	YES										
Ground Fault Protection	YES										
Output Over Current Protection	YES										
Output Short circuit Protection	YES										
Output Over Voltage Protection	YES										
DC Isolator Switch	YES										
Surge Protection	DC: Type III/AC: Type III										
GENERAL DATA											
Dimensions (W*H*D) mm	280*272.5*184						330*323*190				
Weight (Kg)	4.8						7.5				
Topology	Transformerless										
Noise Emission (db)	<25dB										
Display	LED with LCD Display										
Cooling Method	Natural Cooling										
Operating ambient Temp.	(-25 C - +65 C)										
Operating Humidity	0% - 100%										
Max. Operating Altitude (m)	2000 (>2000 Derating)										
Ingress Protection	IP65										
Night Consumption (w)	<1										
Standard Warranty	8 years (extendable upto 10 year)										
CONNECTION TYPE											
DC connetors	MC - 4										
Ingress AC plug	IP65 rated plug										
Monitoring System	WiFi/GPRS/RS 485/ETHERNET LAN/Local Monitoring										