



Voltsmile

Low Voltage Inverter Series

Model	I1-3K	I1-4K	I1-5K
Battery			
Battery Type	Lithium / Lead-Acid	Lithium / Lead-Acid	Lithium / Lead-Acid
Nominal Battery Voltage (V)	51.2	51.2	51.2
Battery Voltage Range (V)	41.6 ~ 58.5	41.6 ~ 58.5	41.6 ~ 58.5
Max. Continuous Charging Current (A)	80	95	95
Max. Continuous Discharging Current (A)	85	100	100
Max. Charge Power (W)	3600	4600	5000
Max. Discharge Power (W)	3600	4600	5000
PV			
Max. Input Power (W)	5200	6600	7000
Max. Input Voltage (V)	500	500	500
MPPT Operating Voltage Range (V)	120 ~ 430	120 ~ 430	120 ~ 430
Start-up Voltage (V)	150	150	150
Nominal Input Voltage (V)	360	360	360
Max. Input Current per MPPT (A)	15	15	15
Max. Short Circuit Current per MPPT (A)	18.9	18.9	18.9
Number of MPPT Trackers	2	2	2
Number of Strings per MPPT	1	1	1



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Model	I1-3K	I1-4K	I1-5K
AC Output (On-grid)			
Rated Power Output to Grid (W)	3600	4600	5000
Max. Apparent Power Output to Grid (VA)	3960	4600	5500
Max. Apparent Power from Grid (VA)	3960	4600	5500
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Grid (A)	17.2	20	23.9
Max. AC Current From Grid (A)	17.2	20	23.9
Type of Infeed	Single-phase	Single-phase	Single-phase
Max. Total Harmonic Distortion	<3%	<3%	<3%
Power Factor (cos)	~0.99 (Adjustable from 0.8 leading to 0.8 lagging)		
Switch Time	<10 ms	<10 ms	<10 ms
AC Output (Off-grid)			
Back-up Rated Power (W)	3600	4500	4500
Max. Output Apparent Power (VA)	3600	4500	150
Max. Output Current (A)	15.6	20	20
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240	15
Nominal Output Frequency (Hz)	50 / 60	50 / 60	220 / 230 / 240
Output THDv (@Linear Load)	<3%	<3%	<3%



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Model	I1-3K	I1-4K	I1-5K
Efficiency			
Max. Efficiency	97.8%	97.8%	97.8%
EU Efficiency	97%	97%	97%
Max. Battery to AC Efficiency	95%	95%	95%
MPPT Efficiency	99.9%	99.9%	99.9%
Protection			
PV Insulation Resistance Detection	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated
Remote Shutdown	Integrated	Integrated	Integrated
Ambient			
Operating Temperature Range (°C)	-25°C ~ 60°C	-25°C ~ 60°C	-25°C ~ 60°C
Over-heat Protection	Continuous power reduction (derating)		
Humidity	0 to 95 % , non-condensingIntegrated		
Max. Altitude	< 2000 m	< 2000 m	< 2000 m
Location	Indoor / Outdoor	Indoor / Outdoor	Indoor / Outdoor
Cooling Type	Air cooled	Air cooled	Air cooled



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Sizing			
Dimensions (W × H × D mm)	350×580×230	350×580×230	350×580×230
Weight (kg)	25±0.5	25±0.5	25±0.5
IP Rating (IEC 60529)	IP65	IP65	IP65
Mounting	Wall Mount	Wall Mount	Wall Mount
Communications			
Communication with BMS	CAN	CAN	CAN
Communication with Meter	RS485	RS485	RS485
Communication with APP / Portal	WiFi	WiFi	WiFi
Display	LCD, WLAN + APP	LCD, WLAN + APP	LCD, WLAN + APP
Monitoring Settings	Integrated Data Logger		
Others			
Topology	Transformerless		
Self-consumption (W)	< 10		
Warranty	5 Years		