

Item	Spec.	Revised Spec.	Product Spec.	QC Spec.
1. Rating	1.1	Rated Power	300 kVA	
	1.2	Rated Current	433 A	
	1.3	Rated AC voltage	240V/415V	
	1.4	Rated DC voltage	720V	
2. Input AC	2.1	Main Input Voltage	240/415V 230/400V (3Φ4W)	
		Voltage range (Configurable)	±10 %	
	2.2	Grid Frequency	50 Hz	
		Frequency Range (configurable)	45-55 Hz	
	2.3	Current THD	<3% at rated Power	
	2.4	Efficiency(On-line mode)	>99% (Battery full charged)	
	2.5	Power factor	Leading 1 to lagging 1	
	2.6	Low voltage cut	205V <sub>L-N</sub>	
		High voltage Cut	Can be included	
		High frequency and Low frequency cut	Can be included	
	2.7	Unbalance load mitigation	Yes	
Reactive power compensation		Yes		
Harmonic compensation		Yes(5th and 7th)		
3. Output AC	3.1	Rated AC output voltage	240/415V	
		Rated AC output current	417A	
	3.2	Waveform	Sine wave	
		Frequency	50Hz ± 1%	
		Voltage harmonic distortion	<3%(linear load)	
	3.3	power factor	0.6(lagging) to 1	
	3.4	Voltage regulation	<2%(linear load)	
	3.5	Overload capacity	>110%-60 s	
			>125%-22 s	
			>130%-Overcurrent trip	
3.6	Unbalance loading	100%(1 phase completely open)		

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	3.7	Voltage symmetry with balanced load		<1.5% (Resistive load)
		Voltage symmetry with 100 % unbalanced load		<3%(Resistive load)
	3.8	Efficiency(Off-grid)		Up to 96.5% (With Isolation Trans.)
				Up to 98.5% (Without Trans.)
3.9	Transfer time with full load		<30 ms	
4. DC Input	4.1	Rated DC voltage		720V
		Voltage range		650-830V
	4.2	Rated DC Current		470A
5. Battery Charger	5.1	Rated AC input		240/415V
	5.2	Rated Charging power		300kW
	5.3	Charging Method		CC-CV
	5.4	Battery charging voltage		830V (adjustable)
Battery charging current			30A (adjustable)	
6. Protection	6.1	DC over voltage limitation protection		Yes
	6.2	DC side short circuit protection		Yes
	6.3	AC overvoltage protection		Yes
	6.4	AC overcurrent protection		Yes
	6.5	Load side short circuit protection		Yes
	6.6	Load side protection device		MCCB
DC side protection device			Fuse	
7. Communication	7.1	Local Monitoring / Display		10.1" LCD Display (HMI) - Touch Screen
	7.2	Built-in Energy data logger		Yes
	7.3	Emergency Power Off (EPO)		Yes
	7.4	Analog Input		16 no

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	7.5	Digital Input	8 no	
	7.6	Digital Output	16 no	
8. General Data	8.1	Dimension (H/W/D)	1400 x 800 x 2150 (mm <sup>3</sup> )	
	8.2	Weight	1400 kg approx.	
	8.3	Operating temperature range	-10°C to +50°C	
	8.4	Relative Humidity	5~95%, non-condensing / non dripping	
	8.5	Operating elevation	<2000 m	
	8.6	Degree of Protection	IP54 (Power Electronics) / IP43 for Transformer and Magnetics;	
	8.7	Pollution degree	PD3	
	8.8	Wet location classification	Wet location	
	8.9	Protective class	Class I	
	8.10	Over voltage category	OVC III Mains	
	8.11	Environmental category	Outdoor with canopy	
	8.12	Noise level (typical)	<80dbA	
	8.13	Cooling (AF)	12 m/s Stack and Filter inductor	
			2.5 m/s Transformer	
8.14	Auxiliary Power	Derived internally (no need for external power)		
9. Compliance to standards	9.1	EMC	IEC 61000-4-2, 3, 4, 6 & 8	
	9.2	Safety	IEC 62109-1:2010, IEC 62109-2:2011	
	9.3	Efficiency	IEC 61683:1999	
	9.4	Harmonics	IEEE 519	
	9.5	Environmental stress tests	IEC 60068-2-1, 2, 14 & 30	
	9.6	IP test	IEC 60529	
10. Factory Setting	10.1	Output voltage	240/415V	
	10.2	Output frequency	50 Hz	
	10.3	Language	English	
	10.4	Charger current setting	30 A	
	10.5	Clear the event log records	Yes	

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	10.6	Battery voltage rating		720Vdc	
	10.7	Number of battery strings		1	
	10.8	Float charge voltage		830Vdc	