



X3-Hybrid HV

(THREE PHASE)

X3-HYBRID-5.0T

X3-HYBRID-6.0T

X3-HYBRID-8.0T

X3-HYBRID-10.0T

INPUT (DC)	X3-HYBRID-5.0T	X3-HYBRID-6.0T	X3-HYBRID-8.0T	X3-HYBRID-10.0T
Max.recommended DC power[W]	6000	8000	Ø	13000
Max.DC voltage[V]	1000	1000	1000	1000
Norminal DC operating voltage[V]	720	720	720	720
Max.input current[A]	11/11	11/11	11/11	20/11
Max. short circuit current[A]	14/14	14/14	14/14	23/14
MPPT voltage range[V] (full load)	230-800	280-800	370-800	330-800
No. of MPP trackers	2	2	2	2
Strings per MPP tracker	1	1	1	2/1
OUTPUT AC				
Norminal AC power [VA]	5000	6000	8000	10000
Max. AC power [VA]	5000	6000	8000	10000
Rated grid voltage(AC voltage range) [V]	400(360 to 440)	400(360 to 440)	400(360 to 440)	400(360 to 440)
Rated grid frequency [Hz]	50/60	50/60	50/60	50/60
Norminal AC current [A]	7.6	9	12.2	15
Max. AC current [A]	8.5	10	13.5	16
Displacement power factor	0.8 leading ... 0.8 lagging			
Total harmonic distortion(THD, rated power) [%]	<2			
Load control	Yes (optional)			
OUTPUT DC (BATTERY)				
Battery voltage range [V]	170-500			
Recommended battery voltage [V]	200	240	320	400
Max.charging/discharging power [W]	6000	8000	10000	10000
Max.charging/discharging current [A]	25			
Communication interfaces	CAN/RS485			
Reverse connect protection	Yes			
EPS OUTPUT (WITH BATTERY)				
EPS rated power [VA]	5000	6000	8000	10000
EPS rated voltage [V], Frequency [Hz]	400/380, 50/60	400/380, 50/60	400/380, 50/60	400/380, 50/60
EPS rated current [A]	7.2	8.7	11.6	14.5
EPS peak power[W];Duration [s]	7500,60	9000,60	12000,60	14000,60
Switch time[s]	<0.5			
Total harmonic distortion(THD, linear load) [%]	<2			
Parallel operation	Being developed			
EFFICIENCY				
MPPT efficiency [%]	99.9			
Euro efficiency [%]	97.0			
Max. efficiency [%]	97.8			
Battery charge/discharge efficiency [%]	97.6 (PV-BAT) 96.0 (BAT-AC)			
POWER CONSUMPTION				
Standby consumption [W]	<7			
Idle mode	YES			
STANDARD				
Safety	IEC62109-1-2 / IEC62040			
EMC	EN61000-6-1/EN61000-6-2/EN61000-6-3			
Certification	VDE0126-1-1 A1:2012/VDE-AR-N4105/G59-3/AS4777/EN50438/CEI 0-21/IEC62619/ISO13849-2/SN29500/IEC615086			
ENVIRONMENT LIMIT				
Protection class	IP65			
Operating temperature range [°C]	-25~+60 (derating at+45)			
Altitude[m]	<2000			
Storage temperature[°C]	-20~+60			
Noise emission(typical) [dB]	<30			
Over voltage category	III (electric supply side), II (PV side)			
DIMENSION AND WEIGHT				
Dimensions(WxHxD) [mm]	655*456*208			
Weight[kg]	40			
Cooling concept	Natural			
Topology	Transformerless			
Communication	Ethernet/Meter/WIFI (optional)/RF(optional)/DRM/USB/Parallel operation			
LCD display	Backlight 20*4 character			
Standard warranty [years]	5-10			

*Can be modified without notice.(V3)