

SINGLE-PHASE HYBRID INVERTER Datasheet (AU)

H3000-EU/H3600-EU/H4000-EU/H4600-EU/H5000-EU/H6000-EU



DC/AC ratio up to 190%



Ultra-quiet $\leq 25\text{dB}$



Max. MPPT current reaching 16A for a single PV string



EPS, Max. Back-up switch time $\leq 20\text{ms}$



The shell adopts integrated die-casting



Charge up to 120A(continuous) / discharge up to 120A(continuous)

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Technical Parameters

Model Item	H3000-EU	H3600-EU	H4000-EU	H4600-EU	H5000-EU	H6000-EU
PV terminal parameter						
Max. PV input power(W)	6000	7200	8000	9200	10000	11400
Max. PV voltage (Vd.c.)	550	550	550	550	550	550
Nominal voltage (Vd.c.)	360	360	360	360	360	360
Startup voltage (Vd.c.)	90	90	90	90	90	90
Minimum operating voltage(Vd.c.)	90	90	90	90	90	90
MPP work voltage range(Vd.c.)	90~550	90~550	90~550	90~550	90~550	90~550
MPP voltage range(full load, Vd.c.)	130~480	130~480	140~480	155~480	165~480	200~480
Number of MPP tracker	2	2	2	2	2	2
Number of strings per MPP tracker	1	1	1	1	1	1
Max. short-circuit current per MPP trackers	20/20	20/20	20/20	20/20	20/20	20/20
Max. input current per MPP tracker(A)	16/16	16/16	16/16	16/16	16/16	16/16
Backfeed current to the array	0A	0A	0A	0A	0A	0A
Battery terminal parameter(compatible with LiFeP04 battery or Lead acid)						
Battery voltage range(Vd.c.)	42~58	42~58	42~58	42~58	42~58	42~58
Nominal voltage (Vd.c.)	50	50	50	50	50	50
Min. full load voltage(Vd.c.)	45	45	45	45	45	45
Max. charge/discharge current(A)	66.7/66.7	80/80	87/87	100/100	100/100	120/120
Max. continuous charge/discharge power(W)	3000	3600	4000	4600	5000	6000

Grid terminal parameter						
Nominal voltage (Va.c.)	230					
Nominal frequency(Hz)	50/60					
Rated output power(W)	3000	3680	4000	4600	5000	6000
Rated output apparent power(VA)	3000	3680	4000	4600	5000	6000
Max. output apparent power(VA)	3000	3680	4000	4600	5000	6000
Rated output current(A)	13	16	17.4	20	21.7	26
Max. output current (A)	20	20	24	24	27	27
Max. input power(W)	4500	5520	6000	6900	7500	9000
Max. input apparent power(VA)	4500	5520	6000	6900	7500	9000
Max. input current(A)	24	24	33	33	39	39
Maximum output fault peak current	75A (50uS)	75A (50uS)	75A (50uS)	75A (50uS)	75A (50uS)	75A (50uS)
Maximum output over current protection	65A	65A	65A	65A	65A	65A
Power factor range	0.8 cap~0.8 ind	0.8 cap~0.8 ind	0.8 cap~0.8 ind	0.8 cap~0.8 ind	0.8 cap~0.8 ind	0.8 cap~0.8 ind
Backup terminal parameter						
Nominal voltage (Va.c.)	230					
Nominal frequency(Hz)	50/60					
Rated output power(W)	3000	3680	4000	4600	5000	6000
Rated output apparent power (VA)	3000	3680	4000	4600	5000	6000

Max. output apparent power (VA)	3000	3680	4000	4600	5000	6000
Rated output current(A)	13	16	17.4	20	21.7	26
Max. output current (A)	20	20	24	24	27	27
Efficiency						
MAX. efficiency	97.00%	97.00%	97.10%	97.10%	97.20%	97.20%
European efficiency	96.60%	96.60%	96.70%	96.70%	96.80%	96.80%
MPPT efficiency	≥99.5%					
Protection devices						
DC switch	Yes					
DC reverse polarity protection	Yes					
AC/DC surge protection	Yes					
Battery reverse protection	Yes					
AC short-circuit protection	Yes					
Ground fault monitoring	Yes					
Grid monitoring	Yes					
Anti-islanding protection	Yes (refer to IEC-62116)					
Residual-current monitoring unit	Yes					
Insulation resistance monitor	Yes					

Overvoltage class	OVC III[AC], OVC II[PV]
General information	
Ingress protection	Ip65
Operation ambient temperature range	-25~60°C, derating above 45°C
Altitude	<4000m
Relative humidity	0~100%
Dimensions [W*H*D]	568*472*188mm
Weight	≈29.6KG
Noise	≤25dB
Protective Class	Class I
Monitor	WIFI/GPRS
Isolated topology	PV to AC non-isolated, battery to PV/AC high frequency isolated
Warranty	10 Years
Country of manufacture	Made in China
Certification	
Grid code	VDE-AR-N 4105, VDE V 0124-100, AS/NZS 4777.2, NC RfG:2016, PSE:2018, PTPIREE:2021, VDE 0126-1-1, EN 50549-1 and grid code of DK, NL, FI, CEI 0-21, G98, G99, UNE 217001-2020, UNE 217002-2020, NTS SEPE:2021 (Type A), RD 1699:2011, NRS 097-2-1, IEC 61727, IEC 62116, TOR Type A/B:2022, OVE R25:2020, C10/C11:2021
Safety	IEC/EN IEC/BS EN62109-1:2010, IEC/EN/BS EN62109-2:2011, AS 60947-3:2018, IP65
EMC	IEC/EN IEC/BS EN IEC 61000-6-1, IEC/EN/BS EN IEC 61000-6-3, IEC61000-2-2 & CISPR11