

# 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
<b>PV terminal parameter</b>						
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
<b>Battery terminal parameter(compatible with LiFeP04 battery or Lead acid)</b>						
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
<b>Stand-alone terminal parameter</b>						
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

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

<b>Overvoltage class</b>	OVC III[AC], OVC II[PV]
<b>General information</b>	
<b>Ingress protection</b>	Ip65
<b>Operation ambient temperature range</b>	-25~60°C, derating above 45°C
<b>Altitude</b>	<4000m
<b>Relative humidity</b>	0~100%
<b>Dimensions [W*H*D]</b>	568*472*188mm
<b>Weight</b>	≈29.6KG
<b>Noise</b>	≤25dB
<b>Protective Class</b>	Class I
<b>Monitor</b>	WIFI/GPRS
<b>Isolated topology</b>	PV to AC non-isolated, battery to PV/AC high frequency isolated
<b>Warranty</b>	10 Years
<b>Country of manufacture</b>	Made in China
<b>Certification</b>	
<b>Grid code</b>	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
<b>Safety</b>	IEC/EN IEC/BS EN62109-1:2010, IEC/EN/BS EN62109-2:2011, AS 60947-3:2018, IP65
<b>EMC</b>	IEC/EN IEC/BS EN IEC 61000-6-1, IEC/EN/BS EN IEC 61000-6-3, IEC61000-2-2 & CISPR11