



HYBRID INVERTER

HP3-5K/6K/8K/10K/12K D2
HP3-15K/20K/25K/30K T2

High Performance

- 200% DC input oversizing
200% overload for backup loads
- Seamless switch for backup mode

Smart Management

- Peak shaving mode
- Support half-wave loads
Remote control and upgrade

Flexible Application

- Supports parallel function
100% unbalanced output
- Compatible with generator

Safe and Reliable

- AC & DC SPD type II
- AFCI function optional
Touch-free, one-click communication

As the core of the energy storage solution, MECC three phase hybrid inverter offers flexible and social-able solutions for both residential and commercial applications. With the ability of scalable battery storage, the high-voltage inverter facilitate powerful energy backup and also present high self-consumption with optimized built-in EMS to reduce energy cost.

Application scenario



MODEL	HP3-5KD2	HP3-6KD2	HP3-8KD2	HP3-10KD2	HP3-12KD2	HP3-15KT2	HP3-20KT2	HP3-25KT2	HP3-30KT2
PV INPUT									
MAX. PV INPUT POWER	10000WP	12000WP	16000WP	20000WP	24000WP	30000WP	40000WP	50000WP	60000WP
MAX. PV INPUT VOLTAGE	1000V								
NOMINAL INPUT VOLTAGE	600V								
MPPT VOLTAGE RANGE	150 V - 950 V								
NO. OF MPPTS/STRINGS PER MPPT	2 / (1+1)		2 / (2+1)		3 / (2+2+1)		3 / (2+2+2)		
MAX. PV CURRENT	16A / 16A		32A / 16A		32A / 32A / 16A		32A / 32A / 32A		
MAX. SHORT CIRCUIT CURRENT	20 / 20A		40A / 20A		40A / 40A / 20A		40A / 40A / 40A		

AC OUTPUT @ GRID									
MAX. AC INPUT POWER	10000WP	12000WP	16000WP	20000WP	20000WP	30000WP	40000WP	40000WP	40000WP
MAC. AC INPUT CURRENT	15.5A	18.6A	24.8A	31.0A	31.0A	43.5A	58.0A	58.0A	58.0A
NOMINAL AC OUTPUT POWER	5000W	6000W	8000W	10000WP	12000WP	15000WP	20000WP	25000WP	30000WP
NOMINAL AC VOLTAGE	3W + N + PE, 380V, 400V, 415V								
AC FREQUENCY	45 - 55HZ / 55 - 65HZ								
MAX. AC CURRENT	7.6A	9.1A	12.1A	15.2A	18.2A	22.8A	30.4A	37.9A	45.5A
THDI @RATED POWER[%]	< 3%								
POWER FACTOR	~1 (ADJUSTABLE FROM 0.8 LEADING TO 0.8 LAGGING)								

EPS OUTPUT @ OFF GRID									
NOMINAL EPS POWER	5000W	6000W	8000W	10000WP	12000WP	15000WP	20000WP	25000WP	30000WP
EPS PEAK POWER (10S)	12KW		18.6KW			35KW		39.3KW	
NOMINAL OUTPUT VOLTAGE	3W + N + PE, 220 / 380V, 230 / 400V, 240 / 415V								
NOMINAL FREQUENCY	50HZ / 60HZ								
NOMINAL OUTPUT CURRENT	7.3A	8.7A	11.6A	14.5A	17.4A	21.8A	29.0A	36.3A	43.5A
THDV @LINEAR POWER[%]	< 3%								

BATTERY INPUT									
BATTERY TYPE	LITHIUM								
BATTERY VOLTAGE	100V - 700 V								
MAX. CHARGE/DISCHARGE CURRENT	50A / 50A								
COMMUNICATION WITH BMS	CAN								

EFFICIENCY									
MAX. EFFICIENCY	97.90%	97.90%	98.00%	98.00%	98.00%	98.10%	98.10%	98.20%	98.20%
EURO EFFICIENCY	98.20%	97.30%	97.40%	97.50%	97.50%	97.70%	97.50%	97.80%	97.80%

GENERAL DATA									
DIMENSION (W*H*D)	540*470*210 MM				595*485*235 MM				
WEIGHT	26KG				38KG				
COOLING	NATURAL CONVECTION				INTELLIGENT FAN				
PROTECTION RATING	IP65								
MOUNTING METHOD	WALL-MOUNTED								
OPERATING TEMPERATURE RANGE	-25 ° C TO +60 ° C								
DISPLAY	LED & APP								
COMMUNICATION	WI-FI / DO / DI / RS485								
GRID REGULATION	IEC 61727:2004, IEC 62116:2014, EN 50549-1:2019, (EU) 2016/631, CEI 0-21, VDE-AR-N-4105:2018, UNE 217002:2020-10, NRS 097-2-1:2024, G98/G99								
SAFETY/EMCSTANDARD	EN 62109-1:2010, EN 62109-2:2011, DIN VDE V 0124-100:2020-06, ITC-BT-40 (RD 244/2019) IEC 61683:1999, RD 413/2014, RD 1699/2011, NTS TYPE A								