



HYBRID INVERTER

HPI-7K5/8K S2M, HPI-10K/12K/14K/16KS2

MECC'S 7.5-16KW SINGLE-PHASE ENERGY STORAGE INVERTER OFFERS ROBUST HOME ENERGY MANAGEMENT WITH UP TO 250A CHARGING/DISCHARGING CURRENTS FOR FAST CHARGING AND RELIABLE BACKUP. ITS USER-FRIENDLY COLOR TOUCH LCD SCREEN SIMPLIFIES OPERATIONS, WHILE ITS FLEXIBILITY ALLOWS FOR MULTI-UNIT PARALLEL OPERATION AND COMPATIBILITY WITH VARIOUS BATTERY SYSTEMS. IT CAN ALSO INTEGRATE WITH DIESEL GENERATORS FOR DIVERSE ENERGY NEEDS. OPTION FOR MECC FOR A SMART AND EFFICIENT HOME ENERGY SOLUTION.

High Generation & Scalability

- Max charging and discharging current of up to 250A. Up to 200% DC input oversizing and PV current to 32A, support 182&210 photovoltaic modules
- Max 6 pcs parallel for on-grid and off-grid operation.

Adaptable Applications

- AC couple to retrofits existing solar systems.
- Supports storing energy from diesel generators.

Friendly & Thoughtful Design

- Color touch LCD screen combined with auxiliary function buttons.
- 6 adjustable time slots for charging and discharging the battery.

Safe & Protection

- Seamless Transition: Backup with UPS-level switching < 10ms
- 10 seconds of 200% overload capability.
- IP66 ingress protection

MODEL	HPI-7K5S2M	HPI-8K5S2M	HPI-10K5S2M	HPI-12K5S2M	HPI-14K5S2M	HPI-16K5S2M
EFFICIENCY						
MAX. EFFICIENCY	97.60%					
EURO EFFICIENCY	96.80%					
BATTERY						
BATTERY TYPE	LI-ION / LEAD-ACID					
BATTERY VOLTAGE	40V - 60V					
MAX. CHARGE/DISCHARGE POWER	7500W	8000W	10000W	12000W	14000W	16000W
MAX. CHARGE/DISCHARGE CURRENT	190 A	190 A	220 A	250 A	290 A	290 A
COMMUNICATION WITH BMS	CAN / RS485					

Application scenario



MODEL	HPI-7K5S2M	HPI-8K5S2M	HPI-10K5S2M	HPI-12K5S2M	HPI-14K5S2M	HPI-16K5S2M
PV INPUT						
MAX. PV INPUT POWER	15000WP	16000WP	20000WP	24000WP	28000WP	32000WP
MAX. PV INPUT VOLTAGE	500V					
MIN. PV INPUT VOLTAGE	60V					
MPPT VOLTAGE RANGE	60-500					
STARTUP VOLTAGE	70V					
NO. OF MPPTS/STRINGS PER MPPT	2 / 2		3 / 2			
MAX. PV INPUT CURRENT	32 / 32		32 / 32 / 32			
MAX. SHORT CIRCUIT CURRENT	40 / 40		40 / 40 / 40			
AC @ GRID						
MAX. AC INPUT POWER	13800W			20700W		
MAC. AC INPUT CURRENT	60A			90A		
NOMINAL AC OUTPUT POWER	7500W	8000W	10000W	12000W	14000W	16000W
MAX. AC OUTPUT POWER	7500W	8800W	11000W	13200W	15400W	17600W
NOMINAL AC VOLTAGE	L/N/PE, 220/230/240					
AC FREQUENCY	50 / 60 HZ					
AC FREQUENCY RANGE	45 - 55 HZ / 55-65 HZ					
MAX. OUTPUT CURRENT	34.1 A	40.0 A	50.0 A	60.0 A	70.0 A	80.0 A
NOMINAL OUTPUT CURRENT	34.1 A	36.4 A	45.5 A	54.6 A	63.6 A	72.7 A
THDI, RATED POWER[%]	<3%					
POWER FACTOR	> 0.99 AT RATED POWER (ADJUSTABLE 0.8 LEADING - 0.8 LAGGING)					
EPS OUTPUT @ OFF GRID						
NOMINAL EPS POWER	7500W	8000W	10000W	12000W	14000W	16000W
EPS PEAK POWER (10S)	2 TIMES OF RATED POWER, 10S					
NOMINAL OUTPUT VOLTAGE	L/N/PE, 220/230/240					
NOMINAL FREQUENCY	50 / 60 HZ					
NOMINAL OUTPUT CURRENT	34.1 A	36.4 A	45.5 A	54.5 A	63.6 A	72.7 A
THDV, RATED POWER[%]	< 3%					
ON/OFF-GRID SWITCHOVER TIME	< 10 MS					
INVERTER DATA						
DIMENSION (W*H*D)	496*505*225					
WEIGHT	34 KG					
MOUNTING METHOD	FORCED AIR COOLING					
PROTECTION RATING	IP65					
COOLING	WALL MOUNTING					
OPERATING TEMPERATURE RANGE	-25° C TO +60° C (DERATING AT 45° C)					
DISPLAY	LCD + APP					
NOSIE	< 45 DB			< 55 DB		
OPERATING ATTITUDE	< 2000 M					
OPERATING HUMIDITY	0 - 95 %					
GRID REGULATION	IEC 62116, IEC 61727, C10/C11, EN 50549, (EU)2016/631, UNE 217002, G98/G99, OVE R25, UNE 206007-1, CEI 021					
SAFETY/EMC STANDARD	EN/IEC 62109-1/2, EN 62477-1, EN 62040-1, BS/EN 62109-1, PSE_2018-12-18, EN/IEC 61000-6/4, IEC 61683, ETSI EN 303645					
GENERATOR						
MAX. INPUT POWER	7500W	8000W	10000W	12000W	14000W	16000W
MAX. INPUT CURRENT	34.1 A	36.4 A	45.5 A	54.5 A	63.6 A	72.7 A
RATED INPUT FREQUENCY	50 / 60 HZ					