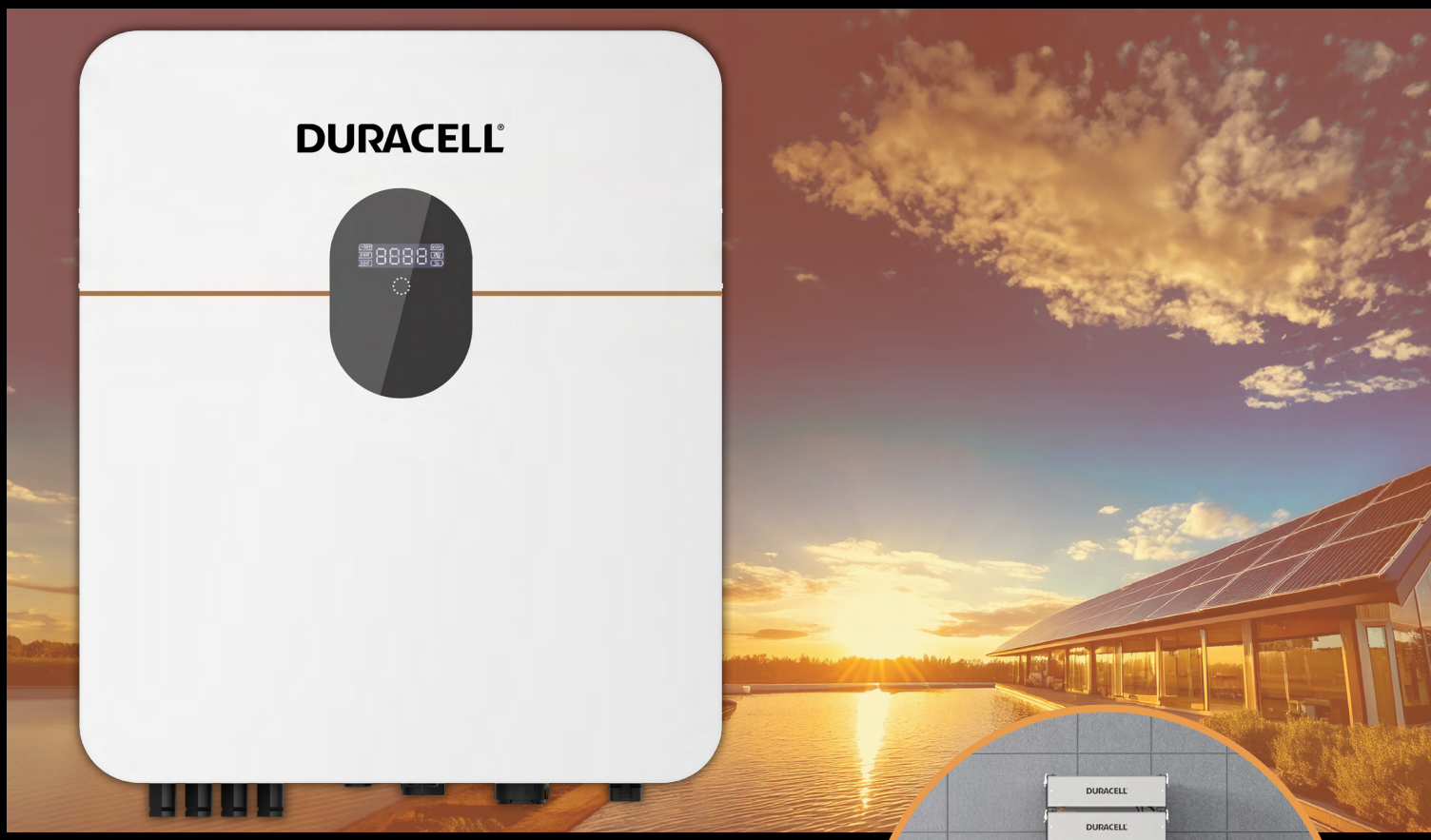
DURACELL® ENERGY

Dura-i (5-10k) HV

Three Phase High Voltage Inverter



Dura5 HV battery compatible with Dura-i HV Inverter

Dura-i HV Inverter

Model Nos. PD-DH3P-5K-G1
PD-DH3P-6K-G1
PD-DH3P-8K-G1
PD-DH3P-10K-G1

Key Inverter Features

- Fanless design & natural convection
- Up to 150% PV oversize
- Die cast aluminium enclosure
- Max efficiency 98.4%
- Dura5 HV Battery compatible

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Dura-i HV Three Phase Inverter - Technical Specification

Product	Dura-i HV Three Phase Inverters 5-10K			
Model No.	**PD-DH3P-5K-G1**	**PD-DH3P-6K-G1**	**PD-DH3P-8K-G1**	**PD-DH3P-10K-G1**
PV (input)				
Max. recommended PV array power (Wp)	7500	9000	12000	15000
Max PV input voltage (V)	1000			
Rated PV input voltage (V)	600			
Start- up input voltage (V)	180			
MPPT voltage range (V)	150-950			
No. of MPPT/Strings per MPPT	2(1/1)			2 (1/2)
Max PV input current (A)	32 (16 /16)			48 (16/32)
Max. DC short- circuit current (A)	40 (20/20)			60 (20/40)
Battery (input/output)				
Battery type	LiFePO4			
Battery voltage range (V)	150-600			
Max. charge/discharge current* (A)	30/30			
Max. charge/discharge power (W)	7500/6000	9000/7200	10600/10600	10600/10600
Grid (input/output)				
Max. AC power from grid (VA)	12500	15000	18600	20600
Rated AC output power (VA)	5000	6000	8000	10000
Max . AC output power (VA)	5500	6600	8800	10000
Max . AC output current (A)	8.4	10	13.3	16.7
Rated AC voltage (V)	3/N /PE, 220 /380; 230 /400; 240 /415			
AC voltage range (V)	270-480			
Rated grid frequency (Hz)	50/60			
Grid frequency range (Hz)	45-55 /55-65			
Total harmonic distortion (THDi, rated power) (%)	<3			
Power factor at rated power/Adjustable power factor	>0.99 /0.8 leading to 0.8 lagging			
Backup (output)				
Rated voltage (V)	3/N/PE, 220/380-; 230/400; 240/415 (±2%)			
Frequency range (Hz)	50/60(±0.5%)			
Total harmonic distortion (THDv, rated power, Linear load) (%)	≤2			
Backup switching time (ms)	<10			
Rated output power (off-grid mode) (VA)	5000W	6000	8000	10000
Peak output power (off-grid mode)**	6000VA, 5min / 10000VA, 10s	7200VA, 5min/ 10000VA, 10s	12000VA, 5min	12000VA, 5min
Max. output power (on-grid mode) (VA)	5500	6600	8800	11000
Max. output current (on-grid mode) (A)	8.4	10	13.3	16.7
Efficiency				
Max. efficiency	98.00	98.20	98.40	
Eur effciency (%)	97.20	97.50	97.90	

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Model No.	**PD-DH3P-5K-G1**	**PD-DH3P-6K-G1**	**PD-DH3P-8K-G1**	**PD-DH3P-10K-G1**
Protection & Function				
Parallel ***	Primary - Secondary mode			
Surge protection	Type II, DC and AC			
Overvoltage category	II DC and III AC			
Protective class	Class I			
Grid monitoring	Yes			
DC reverse polarity protection	Yes			
Battery input reverse polarity protection	Yes			
Insulation monitoring	Yes			
AC short-circuit protection	Yes			
Residual current protection	Yes			
DC switch (PV)	Yes			
Overheat protection	Yes			
AFCI	OPT			
General Data				
Topology (PV/battery)	Transformerless			
Degree of protection	IP65			
Dimensions (W x H x D) (mm)	450 x 550 x 185			
Weight (kg)	31			
Mounting method	Wall-mounting bracket			
Operating ambient temperature range (°C)	-25°C - 60°C (Derating above 45°C)			
Allowable relative humidity range (Non-condensing) (%)	0-100			
Cooling method	Natural convection			
Max. operating altitude (m)	4000			
Display	LED			
Communication	RS485/2 x CAN/WLAN			
DI/DO	1 x DI/1 x DO/DRM			
DC connection type	MC4			
Battery connection type	MC4			
AC connection type	Plug and play connector			
Warranty	10 years			

* Depending on the connected battery
** Can be reached only if PV and battery power is sufficient
*** Detail refer to inverters parallel configuration in Parallel Guide

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