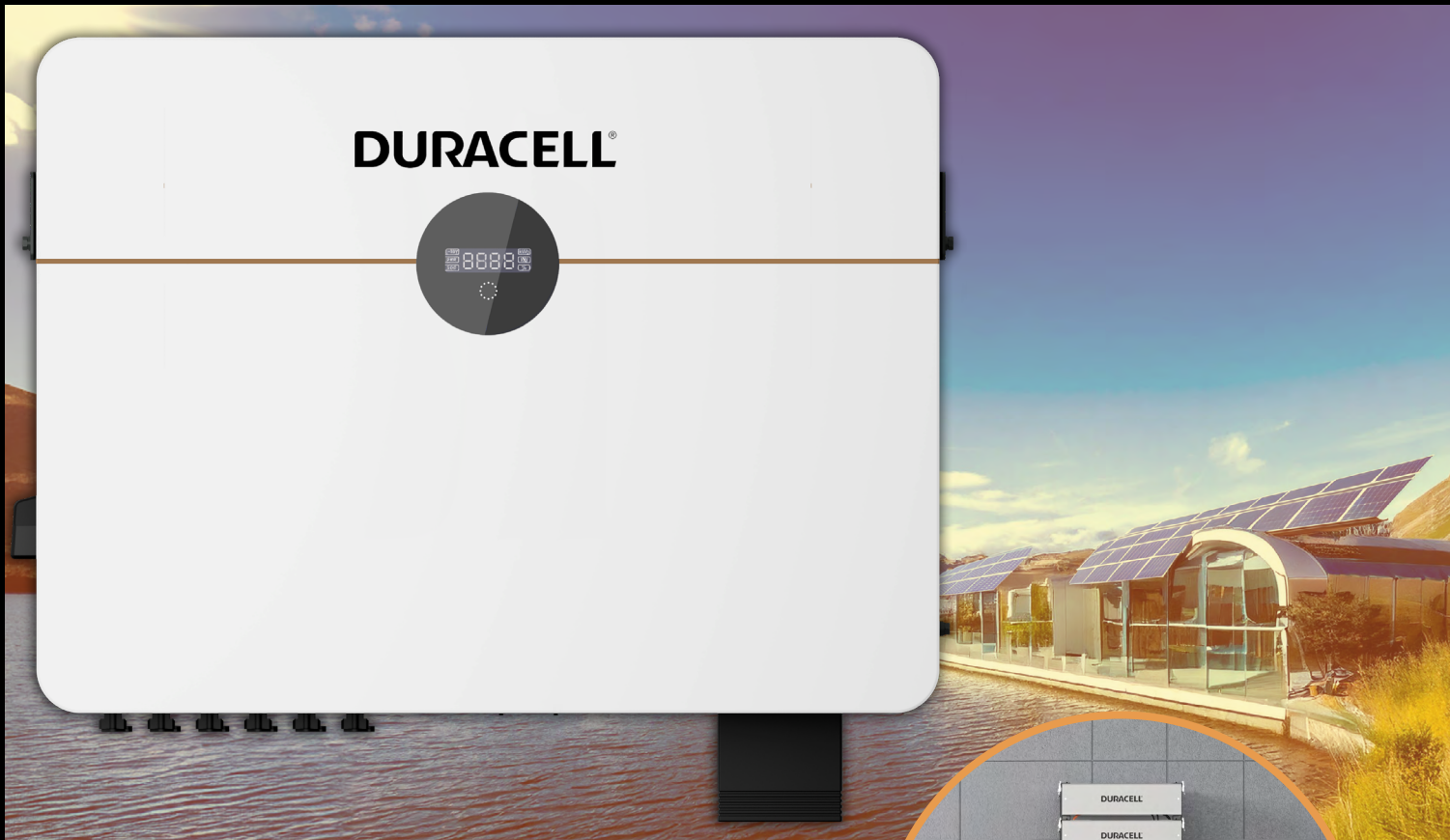


# Dura-i (15-50K) HV

## Three Phase High Voltage Inverter








**Dura5 HV battery compatible  
with Dura-i HV Inverter**



## Dura-i HV Inverter

**Model Nos. PD-DH3P-15K-G1  
PD-DH3P-20K-G1  
PD-DH3P-25K-G1  
PD-DH3P-30K-G1  
PD-DH3P-40K-G1  
PD-DH3P-50K-G1**

### Key Inverter Features

-  Lightest 40/50k inverter
-  Up to 200% PV oversize
-  Die cast aluminium enclosure
-  Max efficiency 97.8%
-  Dura5 HV Battery compatible

## Dura-i HV Three Phase Inverter - Technical Specification

Product	Dura-i HV Three Phase Inverters 15-30K					
Model No.	PD-DH3P-15K-G1	PD-DH3P-20K-G1	PD-DH3P-25K-G1	PD-DH3P-30K-G1	PD-DH3P-40K-G1	PD-DH3P-50K-G1
<b>PV (input)</b>						
Max. recommended PV array power (Wp)	30000	40000	50000	60000		
Max PV input voltage (V)	1000					
Rated PV input voltage (V)	650					
Start- up input voltage (V)	150					
MPPT voltage range (V)	150-950					
No. of MPPT/Strings per MPPT	3(2/1/1)	3(2/2/1)	3 (2/2/2)			
Max PV input current (A)	64(32/16/16)	80(32/32/16)	96 (32/32/32)			
Max. DC short- circuit current (A)	80(40/20/20)	100(40/40/20)	120 (40/40/40)			
<b>Battery (input/output)</b>						
Battery type	LiFePO4					
Battery voltage range (V)	100-800					
Max. charge/ discharge current* (A)	50/50		60/60			65/65
Max. charge/ discharge power (W)	30000/15000	30000/20000	30000/25000	30000/30000	40000/40000	50000/50000
<b>Grid (input/output)</b>						
Max. AC power from grid (VA)	43000W / 43000VA		55000W / 55000VA			
Rated AC output power (VA)	15000	20000	25000	30000	40000	50000
Max . AC output power (VA)	15000	20000	25000	29900	40000	50000
Max . AC output current (A)	22.8	30.3	37.9	45.5	60.6	75.8
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					
<b>Backup (output)</b>						
Rated voltage (V)	3 / N / PE, 220 ; 230 ; 240					
Frequency range (Hz)	50 / 60		50/60			
Total harmonic distortion (THDv, rated power, Linear load) (%)	≤2					
Backup switching time (ms)	<10					
Rated output power (off-grid mode) (VA)	15000	20000	25000	30000	40000	50000
Peak output power (off-grid mode)**	25500 W / 25500VA, 10s	32000 W / 32000VA, 10s	36500W / 36500W, 10s	45000W / 45000VA, 10s	60000W / 60000VA, 10s	70000W / 70000VA, 10s
Max. output power (on-grid mode) (VA)	43000 W / 43000 VA		55000W / 55000W			
Max. output current (on-grid mode) (A)	3 x 63		3 x 80			
<b>Efficiency</b>						
Max. efficiency	98.10		98.20		98.20	
European efficiency (%)	97.60		97.80		97.90	

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Model No.	PD-DH3P-15K-G1	PD-DH3P-20K-G1	PD-DH3P-25K-G1	PD-DH3P-30K-G1	PD-DH3P-40K-G1	PD-DH3P-50K-G1
<b>Protection &amp; Function</b>						
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					
<b>General Data</b>						
Topology (PV/battery)	Transformerless					
Degree of protection	IP66					
Dimensions (W x H x D) (mm)	615 x 465 x 255					
Weight (kg)	36.5		38	38	39.5	39.8
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			Fan cooling		
Noise (Typical)	35dB (A)			55dB (A)		60dB (A)
Max. operating altitude (m)	2000					
Display	LED					
Communication	2 x RS485/2 x CAN/WLAN					
DI/DO	4 x DI/2 x DO/DRMO					
DC connection type	MC4 (PV, Max. 6mm <sup>2</sup> )					
Battery connection type	Plug and play connector (Battery, Max. 10mm <sup>2</sup> )					
AC connection type	OT Terminals (Grid/Backup, Max. 26mm <sup>2</sup> )					
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 User Manual

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