

DURACELL®

SOLAR SOLUTIONS

HYBRID INVERTER

DS-IRH08 SERIES



CHARACTERISTICS

Power classes: 3 kW - 6 kW
Single-phase, 2 independent MPPT depending on the input power of inverter.

Product Name Code: DS-IRH08-3K-2
DS-IRH08-3.6K-2 DS-IRH08-4K-2
DS-IRH08-5K-2 DS-IRH08-6K-2

Quick and Easy to install with basic tools |
Compact wall mount design



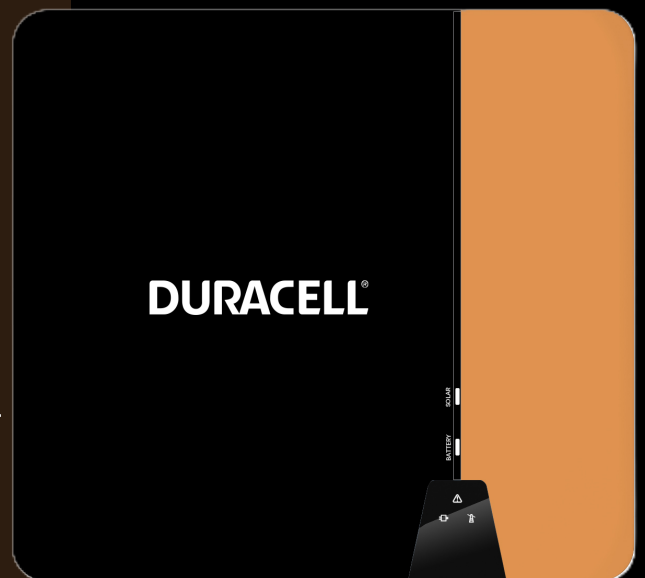
SAFE & USER-FRIENDLY

Smart Energy Management System | UPS Capability-
power during blackouts | IP66 rated design for
outdoor use | 2 independent MPPTs



10 YEARS WARRANTY

Full warranty terms: www.duracellsolarsolutions.com



Technical Datasheet

	DS-IRH08-3k-2	DS-IRH08-3.6k-2	DS-IRH08-4k-2	DS-IRH08-5k-2	DS-IRH08-6k-2		
PV Input	Max. PV array power	5500 W _p STC	6180 W _p STC	6500 W _p STC	7500 W _p STC	9000 W _p STC	
	Max. input voltage	550 V					
	MPP voltage range / rated input voltage	40 V to 530 V / 380 V					
	Min. input voltage / start voltage	40 V / 50 V					
	No. of independent MPPT trackers / strings per MPPT input	2 / 1					
	Max. input current per MPP tracker	16 A					
	Max. short-circuit current per MPP tracker	20 A					
Battery input	Nominal battery voltage	48 V					
	Battery voltage range	40 V to 60 V					
	Max. charging / discharging power	5000 W / 5000 W					
	Max. charging current / Max. discharging current	100 A / 100A					
	Battery type	LiFePO4					
	Compatible Battery	DS-BML08-5.1					
AC output	AC voltage range / Nominal AC voltage	180 V to 280 V / 230 V					
	Rated AC grid frequency	50 Hz / 60 Hz					
	AC grid frequency range	50 Hz±5Hz / 60 Hz±5Hz					
	Rated active power	3000 W	3680 W	4000 W	5000 W* ¹	6000 W	
	Rated apparent power	3000 VA	3680 VA	4000 VA	5000 VA* ¹	6000 VA	
	Max. apparent power	3000 VA	3680 VA	4000 VA	5000 VA* ¹	6000 VA	
	Rated grid output Current (@230V)	13.1 A	16 A	17.4 A	21.7 A	26.1 A	
	Max. grid output current	13.6 A	16 A	18.2 A	22.7 A	27.3 A	
	Harmonics THDi (@ Nominal power)	< 3%					
	AC input	Rated grid voltage	a.c. 230V				
Rated apparent power		6000 VA					
Max. input apparent power from grid		6000 VA					
Rated input current from grid		a.c. 26.1 A					
Max. input current from grid		a.c. 27.3 A					
EPS output	Nominal output voltage	230 V					
	Nominal output frequency	50 Hz / 60 Hz					
	Rated apparent power	5000 VA					
	Max. output apparent power	5000 VA					
	Peak output apparent power	7500 VA, 10s					
	Rated Current (@230V)	21.7A					
	Max. output current	21.7A					
	Max. switch time	≤ 10 ms					
	Output THDi (@ Linear load)	<3%					
Efficiency	MPPT efficiency	99.90%					
	Euro efficiency / Max. efficiency	97% / 97.6%					
	Max. battery to load efficiency	94.70%					
Safety protection	DC-side disconnection device	Available					
	PV string- / Battery input reverse polarity protection	Available					
	All-pole sensitive residual current monitoring unit	Available					
	Anti-islanding protection	Available					
	Ground fault protection	Available					
	AC output over current / short circuit current protection	Available / Available					
	AC over voltage protection	Available					
	Protection class (as per IEC 62109-1) / overvoltage category (as per IEC 62109-1)	I / AC: III; DC: II					
General data	Power factor at rated power / adjustable displacement	≥0.99 / 0.8 leading to 0.8 lagging					
	Dimensions (W * H * D)	483 * 455 * 193.5 mm					
	Device weight	25.1kg					
	Operating temperature range	-25 °C to +60 °C					
	Noise emissions (typical)	30 dB(A)					
	Standby consumption	< 10 W					
	Cooling concept	Natural convection					
	Degree of protection (as per IEC 60529)	IP66					
	Climatic category (according to IEC 60721-3-4)	4K4H					
	Max. permissible value for relative humidity (non-condensing)	100%					
	Max. operating altitude	4000m (>3000m power derating)					
	Features	User interface	LED & App				
		Communication with BMS	CAN				
Communication with meter		RS485					
Communication with portal		WIFI stick / LAN					
Other communication		DRM					
Integrated power control / Zero export control		Available / Available					

1. For VDE-AR-N4105, S_{max}=S_n=4600VA, P_n=4600W

Version: 2025.02.V1-EN

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