

## **H5001 Hybrid Inverter**

## **SPECIFICATIONS**

SOLAR DC INPUT					
Nominal Power	6500W				
Operation/MPPT Voltage Range	120 to 500VDC / 250 to 430VDC				
Minimum Start Voltage	150VDC				
Maximum Input Current	13A / 13A (Two String Input)				
AC OUTPUT TO LOAD	WITH GRID ABSENT	WITH GRID PRESEN			
Output Power (Continuous) @25°C	5500W	7000W			
Overload 40/20/5/1s @25°C & 240V	/ 5500//6500/7500W/9600//W				
Overload 40/5/1s @25°C & 120V	2750/3250/3750W	NA			
Rated Output Current (RMS)	23A (@120V and 240V)	29A (@120V and 24			
Output Frequency (Auto Sensing)	50/60 Hz				
Output Voltage and Accuracy	L-N: 120V ± 3%; L-L: 240V ±	3%			
Output Voltage Limits	L-L: 180 to 280V (240V Nominal)				
Total Harmonic Distortion (THD)	< 5% at rated power				
Power Factor	>99%				
AC INPUT FROM GRID					
Automatic Transfer Power Rating / Typical Transfer Time	7000W / 20ms				
Input Voltage Range	L-L: 180 to 280V (240V Nom	ninal)			
Input Frequency Range	45 to 54.9Hz / 55 to 65Hz				
AC OUTPUT TO GRID (GRID SUPPO	RT)				
Output Power (Continuous) @25°C	5000W				
Grid Feed-In Current Range	0 to 24A (@240V)	<b>9</b> = 1111			
Grid Feed-In Voltage Range	L-L: 211 to 264V ± 3.0V				
Grid Feed-In Frequency Range	49.3 to 50.5Hz / 59.3 to 60.5Hz	Hz ± 0.05Hz			
EFFICIENCY					
Peak/CEC Weighted (PV to Grid)	96%/95.5%				
System Standby Power	20W				
System Idle Power	< 8W				
DC BATTERY CHARGER					
Max Charge/Discharge Current	60A/150A				
Output Voltage Range	44 to 58V (48V Nominal)				
Compatible Battery Types	AGM (default), Gel, Li-ion, Lif	FePO <sub>4</sub> , Custom			

The Darfon H5001 hybrid transformerless inverter is integrated with a distribution box to facilitate easy installation. The distribution box includes quick disconnect terminals, PV and battery disconnects, AC breakers, battery connectors and generator contactor. The H5001 supports a wide range of applications, including off-grid, self-use, net-metering, backup, time-of-use optimization and as a string inverter.

- · Nominal 6.5kW PV with dual MPPT
- · Up to 7kW continuous output to load
- Three-wire inverter for 240V and 120V direct connection
- 50/60 Hz dual-frequency auto sensing
- Compatible with Lithium or lead-acid batteries
- · Manage and monitor system via control panel
- 5-year standard warranty with 5-year extension option

Optional generator kit available and sold separately

GENERAL SPECIFICATIONS				
Weight	39.4kg (86.8 lb)			
Dimensions (HxWxD)	990x448x150mm (39x17.6x5.9in)			
Protection Rating	NEMA 1 Indoor / IP20			
Operating Temperature	0 to 55°C (power derated above 40°C)			
Storage Temperature	-25 to 70°C (-13 to 158°F)			
Compliances	UL 1741 SA, CSA C22.2, IEEE 1547A, IEEE 1547.1, FCC Class B			

MODE DEFINITION		CHARGE I FROM	FEED GRID FROM	PV USE PRIORITY		LOAD PRIORITY			
				1	2	3	1	2	3
1. Back-up (default)		PV or Grid	PV Only	Batt.	Load	Grid	PV	Grid	Batt.
2. Residential		PV Only	PV Only	Load	Batt.	Grid	PV	Batt.	Grid
3. Back-up w/o Feed-in		PV or Grid	None	Batt.	Load	-	PV	Grid	Batt.
4. Residential w/o Feed-in		PV Only	None	Load	Batt.	-	PV	Batt.	Grid
5. Time-of-Use (TOU)	Off-Peak	PV or Grid	PV Only	Batt.	Load	Grid	PV	Grid	Batt.
	Peak	PV Only	PV Only	Load	Batt.	Grid	PV	Batt.	Grid
6. TOU w/Batt. Feed-in	Off-Peak	PV or Grid	PV Only	Batt.	Load	Grid	PV	Grid	Batt.
	Peak	PV Only	PV or Batt.	Load	Grid	Batt.	PV	Batt.	Grid







