

## 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 PRESENT
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 240V)
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 Nominal)	
Input Frequency Range	45 to 54.9Hz / 55 to 65Hz	
AC OUTPUT TO GRID (GRID SUPPORT)		
Output Power (Continuous) @25°C	5000W	
Grid Feed-In Current Range	0 to 24A (@240V)	
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 ± 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, LiFePO <sub>4</sub> , Custom	

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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.

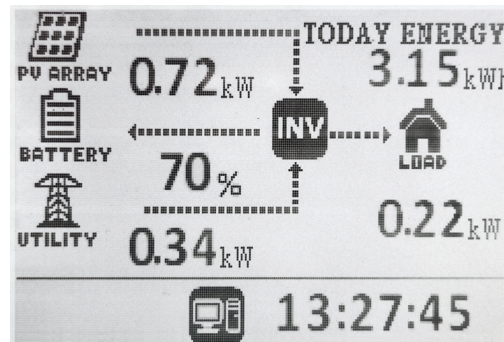
- Nominal 6.5kW PV with dual MPPT
- Up to 7kW continuous output to load
- Three-wire inverter for 240V and 120V direct connection
- 50/60 Hz dual-frequency auto sensing
- Compatible with Lithium or lead-acid batteries
- Manage and monitor system via control panel
- 5-year standard warranty with 5-year 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 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
	Peak	PV Only	PV Only	Load	Batt.	Grid	PV	Batt.
6. TOU w/Batt. Feed-in	Off-Peak	PV or Grid	PV Only	Batt.	Load	Grid	PV	Grid
	Peak	PV Only	PV or Batt.	Load	Grid	Batt.	PV	Batt.



LCD Display – Power Flows Page

If you have a limited budget, a light load to support and don't have the floor space, then the H300 series is the solution for you. The H300 series of hybrid storage systems are wall-mountable pre-configured solutions consisting of a H5001 hybrid inverter and 5kWh Lithium batteries (LNMC).

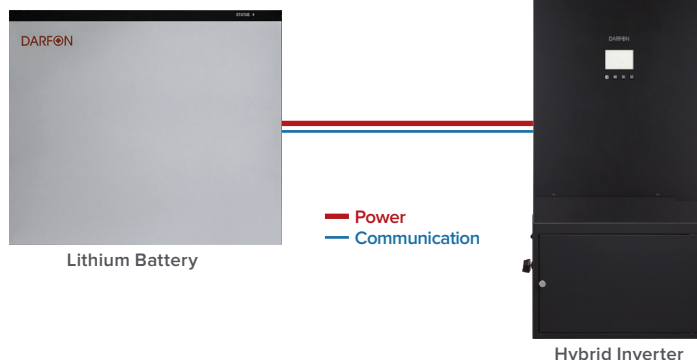
In this series, the H301 has a storage capacity of 5kWh and the H302 has 10kWh. And if the need arises, the H301 can easily be upgraded into the H302.

## SPECIFICATIONS

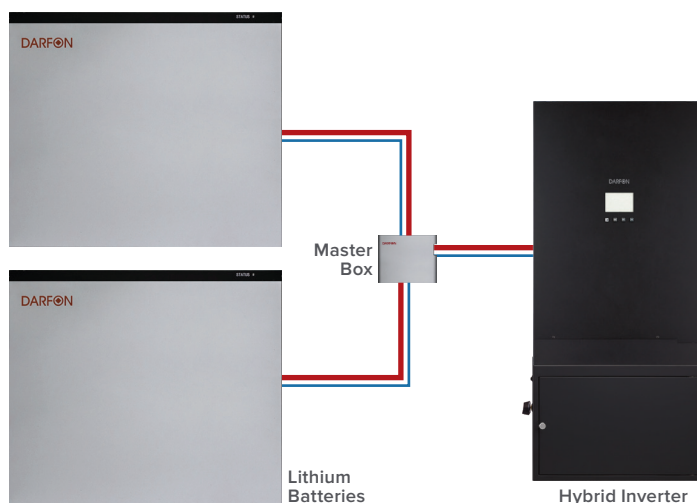
H5001 HYBRID INVERTER	
Continuous AC Output Power @ 25°C	7kW (PV), 2kW (1 Batt.), 3.3kW (2 Batt.)
B05LM LITHIUM BATTERY	
Nominal Voltage	51.1V
Battery Type	Lithium Nickel Manganese Cobalt
Capacity @ 25°C	95.4Ah (4.88kWh)
Cont. Charge/Discharge Current	44A
Peak Discharge Current	58A
Terminal Type / Location	Connector / Side
Depth or Discharge (DOD)	80%
Complete Cycle Life	2500 Cycles at 80% DOD
Battery Management System	OCP/OVP/SCP/OTP
Weight	45.2kg (99.6 lb)
Dimensions (HxWxD)	610x710x167mm (24x28x6.6in)
Protection Rating	NEMA 1 Indoor / IP20
Operating Temperature	-10 to 45°C (14 to 113°F)
Storage Temperature	-40 to 60°C (-40 to 140°F)
Compliances	UL1642, UN38.3, CE
MASTER BOX	
Number of Power Ports	One Inverter, Two Batteries
Communication Ports (Modbus)	One RJ45 (Inverter), Two RJ45 (Battery)
Max. Charge/Discharge Power	2kW (1 Battery), 3.3kW (2 Batteries)
Charge/Discharge Operation Voltage	57.4VDC / 45.5VDC
Weight	0.6kg (1.4 lb)
Dimensions (HxWxD)	181x151x53mm (7.1x5.9x2.1in)
Protection Rating	NEMA 1 Indoor / IP20

## DISTRIBUTED BY

### H301 CONFIGURATION



### H302 CONFIGURATION



- 5kWh Lithium battery included and configured to work out of the box
- Built-in distribution box for fast installation
- Designed for users with a limited budget and houses with less than 2kW load to support
- Transformerless inverter design with true sine-wave AC output and auxiliary port for generator support
- System monitoring and management via the control panel
- Five (5) year standard warranty

## WHAT'S INCLUDED

H301	H302
One (1) H5001 Hybrid Inverter	One (1) H5001 Hybrid Inverter
One (1) Mounting Backplate	One (1) Mounting Backplate
One (1) B05LM Lithium Battery	Two (2) B05LM Lithium Battery
Cables: 1 Power, 1 Communication	Cables: 3 Power, 3 Communication
	One (1) Master Box