

H300 Hybrid Energy Storage System

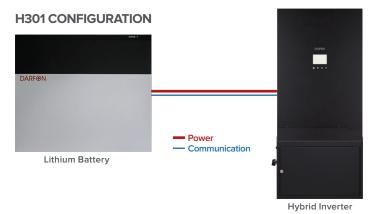
If you have a limited budget, a light load to support and don't have the floor space, then the H300 series is the solution for you. The H300 series of hybrid storage systems are wall-mountable pre-configured solutions consisting of a H5001 hybrid inverter and 5kWh Lithium batteries (LNMC).

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.

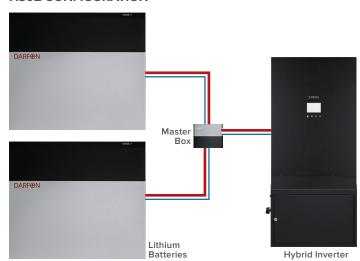
SPECIFICATIONS

H5001 HYBRID INVERTER						
Continuous AC Output Power @ 25°C	ower @ 25°C 5kW (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	57.4 VDC / 45.5 VDC					
Weight	0.6kg (1.4 lb)					
Dimensions (HxWxD)	181x151x53mm (7.1x5.9x2.1in)					
Protection Rating	NEMA 1 Indoor / IP20					





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









H5001 Hybrid Inverter

SPECIFICATIONS

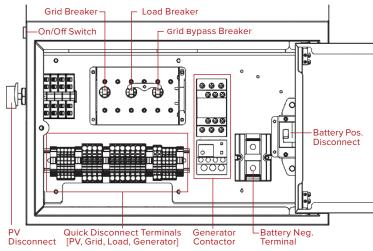
Compliances

SOLAR DC INPUT		
Max Power	6500W	
Operation/MPPT Voltage Range	120 to 500VDC / 250 to 430VDC	
Min Start Voltage	150 VDC	
Max Input Current	13A / 13A (Two String Input)	
NVERTER AC OUTPUT		
Continuous Output Power @ 25°C	5000W	
Overload 40sec/5sec/1sec @ 25°C	5500W/6500W/7500W	
Rated Output Current (RMS)	21A (@120V and 240V)	
Output Frequency (Auto Sensing)	50/60 Hz	
Output Voltage	L-N: 120V ± 3%; L-L: 240V ± 3%	
AC INPUT FROM GRID	in .	
Automatic Transfer Relay Rating / Typical Transfer Time	48A / 20ms	
AC Input Voltage Range	L-L: 180 to 280V (240V Nominal)	11
AC input Frequency Range	55 to 65 Hz	
AC OUTPUT TO GRID	.00	
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	59.4 to 60.4Hz ± 0.05Hz	
EFFICIENCY		
Peak/CEC Weighted (PV to Grid)	96%/95.5%	
DC BATTERY CHARGER		
Max Charge/Discharge Current	60A/150A	
DC Voltage Range	44 to 60V (48V Nominal)	
Compatible Battery Types	AGM (default), Gel, Li-ion, LiFePO ₄ , Custom	1
GENERAL SPECIFICATIONS		
Product Weight	39.4kg (86.8 lb)	
Product Dimensions (HxWxD)	990x448x150mm (39x17.6x5.9in)	
Protection Rating	NEMA 1 Indoor / IP20	
Operating Temperature	0 to 55°C (power derated above 40°C)	

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.

- Up to 6.5kW PV with dual MPPT
- Compatible with Lithium or lead-acid based batteries
- Manage and monitor system via control panel
- Five (5) year standard warranty



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	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

UL 1741 SA, CSA C22.2, IEEE 1547, FCC Class B

