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## H5000 Hybrid Inverter

The Darfon H5000 features a true hybrid design with power sharing between various power sources. This hybrid inverter prioritizes the energy flow and direction from the batteries, PV modules and utility. The H5000 also comes with system monitoring and generator support. It was designed to accommodate both wall or rack mounting options. The H5000 Hybrid Inverter supports a wide range of applications, including off-grid, self-use, net-metering, backup and time-of-use optimization.

### H5000 SPECIFICATIONS

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)						
INVERTER 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							
Automatic Transfer Relay Rating / Typical Transfer Time	33A / 20ms						
AC Input Voltage Range	L-L: 180 to 280V (240V Nominal)						
AC input Frequency Range	55 to 65 Hz						
AC OUTPUT TO GRID							
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 PV to Grid	96%						
CEC weighted PV to Grid	95.5%						
DC BATTERY CHARGER							
Max Charge Current	60A						
Max Discharge Current	150A						
DC Voltage Range	42 to 60V (48V Nominal)						
Compatible Battery Types	AGM (default), Gel, Li-ion, LiFePO4, Custom						
GENERAL SPECIFICATIONS							
Product Weight	35.0kg (71.2lb)						
Product Dimensions (H x W x D)	69 x 44.5 x 15cm (27.2 x 17.5 x 5.9in)						
Protection Rating	NEMA 1 Indoor / IP20						
Operating Temperature	0 to 55°C (power derated above 40°C)						
Storage Temperature	-25 to 70°C						
Compliances	UL 1741, IEEE 1547, FCC Class B						



- True hybrid design with sharing between various power sources
- Up to 6.5kW of input power with built-in MPPT solar charger
- Compatible with Lithium or lead-acid based batteries
- Six (6) preset modes: Backup, backup w/o grid feed-in, residential, residential w/o grid feed-in, TOU, and TOU w/battery feed-in
- · Auxiliary port for generator support
- Transformerless inverter design with true sine-wave AC output
- · Flexible design for either wall- or rack-mounted installations
- System monitoring and management via the control panel
- Five (5) year standard warranty



#### For more information, visit/contact us at www.darfonsolar.com or pvsales@darfon.com

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### MODE DEEINIITION

MODE DEFINITION		CHARGE SOURCE		GRID FEED-IN FROM		PRIORITY FOR PV INPUT TO			PRIORITY FOR LOAD FROM		
		PV	Grid	PV	Batt.	Load	Batt.	Grid	PV	Grid	Batt.
1. Back-up (default)		Yes	Yes	Yes	No	2	1	3	1	2	3
2. Residential		Yes	No	Yes	No	1	2	3	1	3	2
3. Back-up w/o Feed-in		Yes	Yes	No	No	2	1	X	1	2	3
4. Residential w/o Feed-in		Yes	No	No	No	1	2	Х	1	3	2
5. TOU	Off-Peak Period	Yes	Yes	Yes	No	2	1	3	1	2	3
	Peak Period	Yes	No	Yes	No	1	2	3	1	3	2
6. TOU w/Batt. Feed-in	Off-Peak Period	Yes	Yes	Yes	No	2	1	3	1	2	3
	Peak Period	Yes	No	Yes	Yes	1	3	2	1	3	2

Back-up

Residential

When to use: The utility is cheap, but power is unstable. Residential

When to use: The utility is expensive, but power is stable.

**Back-up Without** Feed-in

When to use: The utility is cheap, and you do not want to feed into the grid.





Time-Of-Use (TOU)



Time-Of-Use (TOU) with Battery Feed-in

When to use: When TOU is difined, and battery feed-in is allowed.









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