

Stacking of hybrid inverters is incredibly useful. Generally you are limited by the inverter in how much power and energy you can use and supply to your household. But what happens if you need more?

The Darfon H5001STK hybrid inverters feature a stacking ability so you can configure your system to fit your site specific demands. Stacking two hybrid inverters for up to 14kW to essential load with grid present and 8.8kW without. If that is not enough, you can stack a third hybrid inverter for up to 21kW to essential load with grid present and 13.2kW without.

### BATTERY CAPACITY

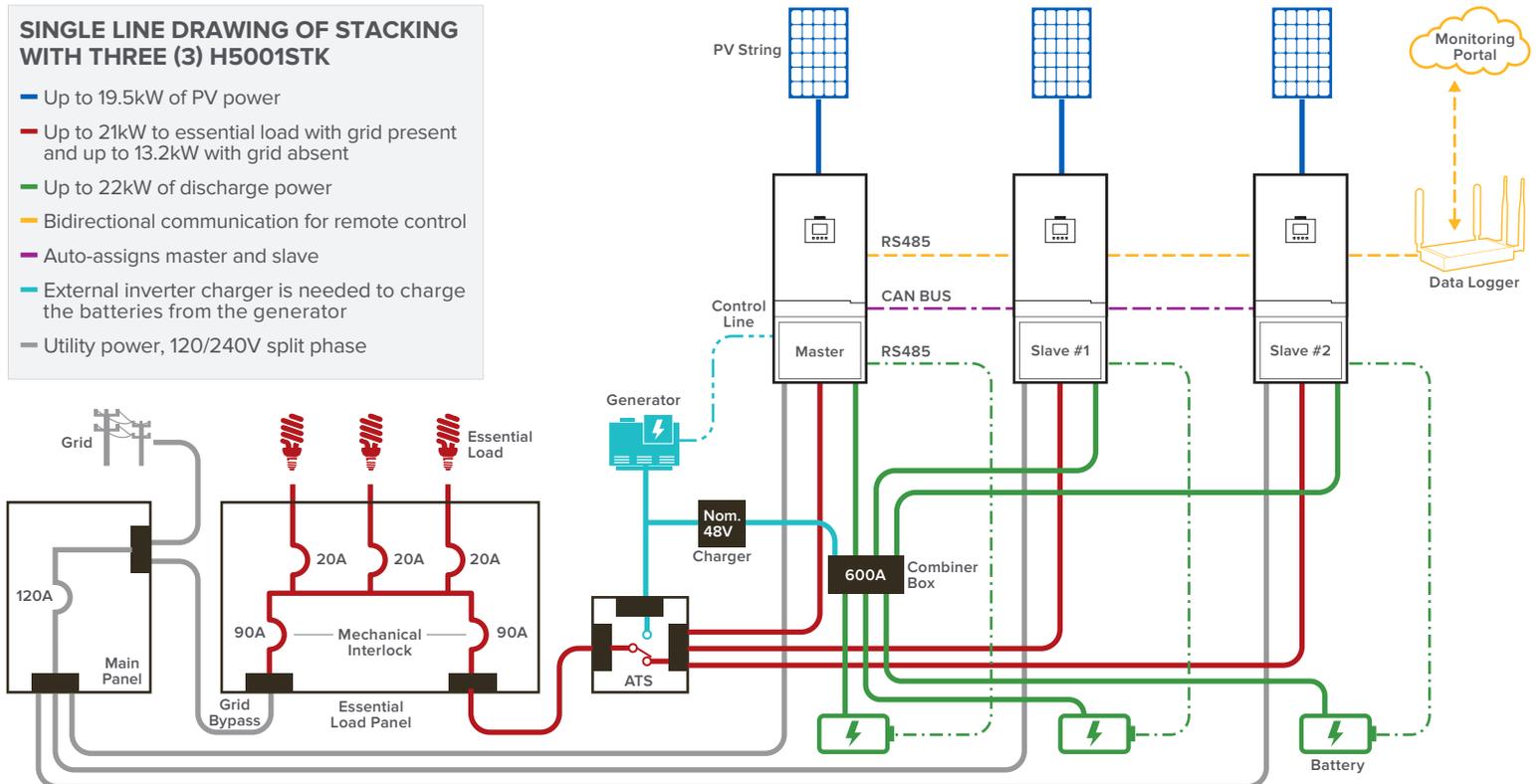
Stacking not only increases the amount of power, it also increases the energy storage capacity. Each hybrid inverter has its own charging capability and can be controlled to work together. So you can incrementally add power and storage in parallel at the same time. This makes designing and configuring sites with larger demands easier. Below are a few possible system configurations.



Storage Capacity	38.4kWh	48kWh	57.6kWh	72kWh
Battery Model	B09ULF	B12LF	B09ULF	B12LF
Total No. of Inverters	2	2	3	3
Max No. of Batteries	4	4	6	6
Max PV Power	13kW	13kW	19.5kW	19.5kW
Max AC Load On-Grid	14kW	14kW	21kW	21kW
Max AC Load Off-Grid	8.8kW	8.8kW	13.2kW	13.2kW

### SINGLE LINE DRAWING OF STACKING WITH THREE (3) H5001STK

- Up to 19.5kW of PV power
- Up to 21kW to essential load with grid present and up to 13.2kW with grid absent
- Up to 22kW of discharge power
- Bidirectional communication for remote control
- Auto-assigns master and slave
- External inverter charger is needed to charge the batteries from the generator
- Utility power, 120/240V split phase



**SPECIFICATIONS**
**TWO (2) H5001STK**
**THREE (3) H5001STK**

SOLAR DC INPUT					
Maximum Power	13kW (6.5kW per inverter)			19.5kW (6.5kW per inverter)	
Operation/MPPT Voltage Range	120 to 500VDC / 250 to 430VDC			120 to 500VDC / 250 to 430VDC	
Minimum Start Voltage	150VDC			150VDC	
Maximum Input Current	13A / 13A (two string inputs per inverter)			13A / 13A (two string inputs per inverter)	
AC OUTPUT TO LOAD	WITH GRID ABSENT	WITH GRID PRESENT	WITH GRID ABSENT	WITH GRID PRESENT	
Output Power (Continuous) @25°C	8.8kW	14kW	13.2kW	21kW	
Rated Output Current (RMS)	36A (@120V and 240V)	58A (@120V and 240V)	55A (@120V and 240V)	87A (@120V and 240V)	
Output Frequency (Auto Sensing)	50/60 Hz		50/60 Hz		
Output Voltage and Accuracy	L-N: 120V ± 3%; L-L: 240V ± 3%		L-N: 120V ± 3%; L-L: 240V ± 3%		
Output Voltage Limits	L-L: 180 to 280V (240V Nominal)		L-L: 180 to 280V (240V Nominal)		
Total Harmonic Distortion (THD)	< 5% at rated power		< 5% at rated power		
Power Factor	> 99%		> 99%		
AC INPUT FROM GRID					
Automatic Transfer Power Rating / Typical Transfer Time	14kW / 20ms		21kW / 20ms		
Input Voltage Range	L-L: 180 to 280V (240V Nominal)		L-L: 180 to 280V (240V Nominal)		
Input Frequency Range	45 to 54.9Hz / 55 to 65Hz		45 to 54.9Hz / 55 to 65Hz		
AC OUTPUT TO GRID (GRID SUPPORT)					
Output Power (Continuous) @25°C	10kW		15kW		
Grid Feed-In Current Range	0 to 48A (@240V)		0 to 72A (@240V)		
Grid Feed-In Voltage Range	L-L: 211 to 264V ± 3.0V		L-L: 211 to 264V ± 3.0V		
Grid Feed-In Frequency Range	49.3 to 50.5Hz / 59.3 to 60.5Hz		49.3 to 50.5Hz / 59.3 to 60.5Hz		
EFFICIENCY					
Peak/CEC Weighted (PV to Grid)	96%/95.5%		96%/95.5%		
System Standby Power	40W		60W		
System Idle Power	< 16W		< 24W		
DC BATTERY CHARGER					
Max Charge/Discharge Current	120A/300A (60A/150A per inverter)		180A/450A (60A/150A per inverter)		
Output Voltage Range	44 to 58V (48V Nominal)		44 to 58V (48V Nominal)		
Compatible Battery Types	AGM, Gel, Li-ion, LiFePO <sub>4</sub> , Custom		AGM, Gel, Li-ion, LiFePO <sub>4</sub> , Custom		
GENERAL SPECIFICATIONS PER INVERTER					
Weight	39.4kg (86.8 lb)		39.4kg (86.8 lb)		
Dimensions (HxWxD)	990x448x150mm (39x17.6x5.9in)		990x448x150mm (39x17.6x5.9in)		
Protection Rating	NEMA 1 Indoor / IP20		NEMA 1 Indoor / IP20		
Operating Temperature	-20 to 50°C (-4 to 122°F)		-20 to 50°C (-4 to 122°F)		
Minimum Startup Temperature	0°C (32°F)		0°C (32°F)		
Storage Temperature	-25 to 70°C (-13 to 158°F)		-25 to 70°C (-13 to 158°F)		
Compliances	UL 1741 SA, CSA C22.2, IEEE 1547A, IEEE 1547.1, FCC Class B, HECO Compliant		UL 1741 SA, CSA C22.2, IEEE 1547A, IEEE 1547.1, FCC Class B, HECO Compliant		