

# Solar Hybrid Systems



- ▶ Solar Hybrid Inverters – **Infini**
- ▶ Lithium Battery Packs - **LiMax**
- ▶ Solar Hybrid Power Plants

UPS | Inverter | Solar Water Heater | Stainless Steel Water Tank | Tubular Battery | Solar Power Plant  
Lithium-Ion Battery | E-Auto | E-Generator | BESS | Solar Hybrid Inverter

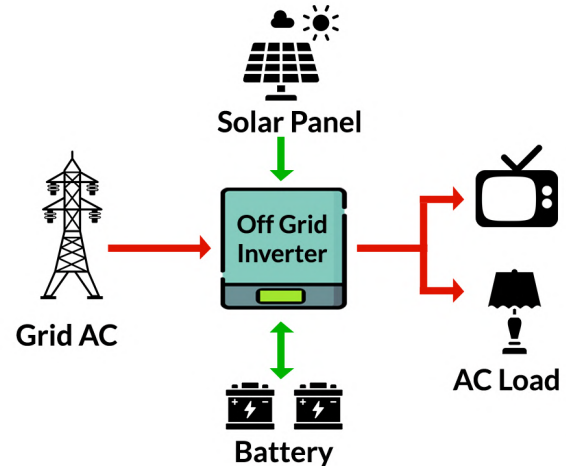
Hykon India Ltd. Corp. Office: Hykon House, Ikkanda Warriar Road, Thrissur - 680001, Kerala, India. Ph: 0487 2444183. E-mail: ho@hykonindia.com



## Types of Solar Inverters

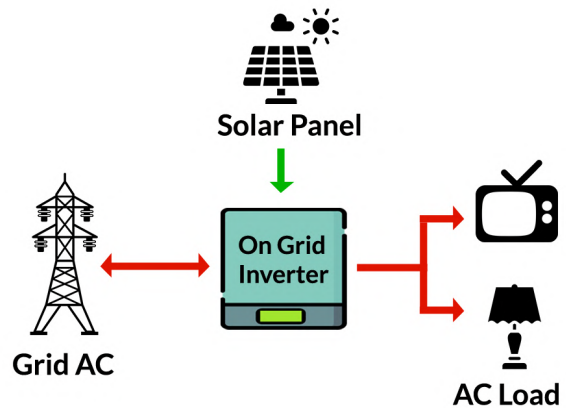
### 1 Off Grid

Solar Off-Grid Inverters function similarly to regular household inverters. The key distinction lies in their ability to charge batteries directly from solar panels.



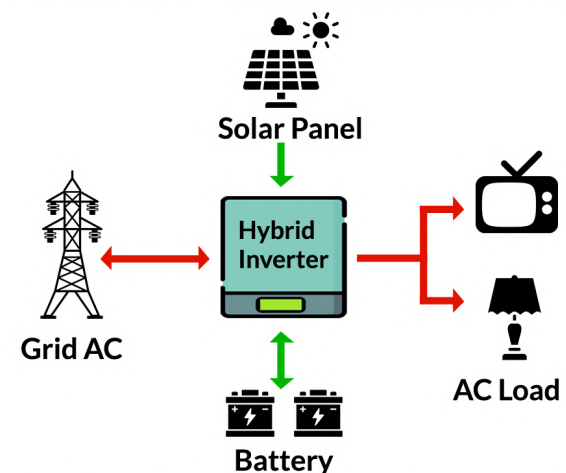
### 2 On Grid

On-Grid Inverter uses energy from solar panels to power your home, with support from the grid. If it generates extra energy, it sends it back to the grid. However, since it doesn't have a battery backup, it won't work during grid outage.



### 3 Hybrid

Hybrid inverters have both Off-Grid and On-Grid functions. The load can operate exclusively from solar, battery or the grid. It will work during Power failure also.





## Infini - Hykon Solar Hybrid Inverters



Infini HSH 3 : 3KW



Infini HSH 6 : 6KW



Infini HSH 10 : 10KW



Infini HSH 15 : 15KW

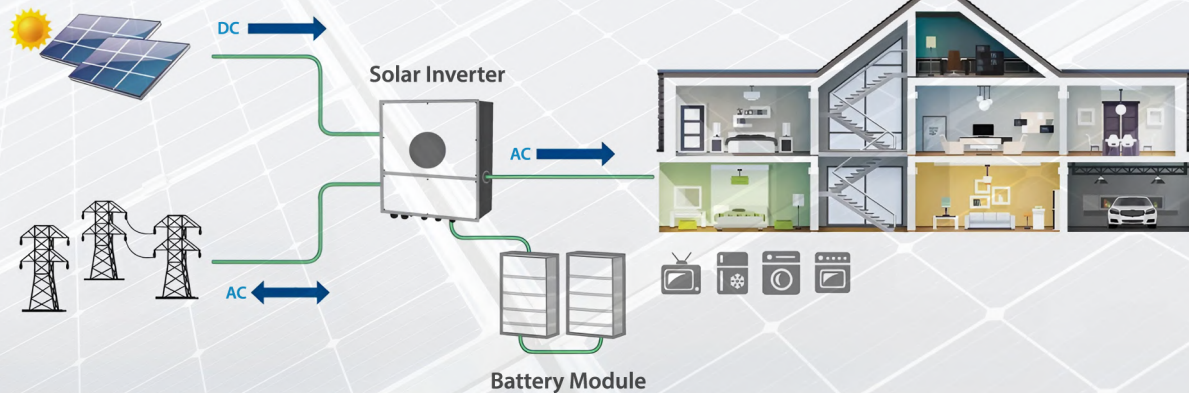


Infini HSH 30 : 30KW



Infini HSH 50 : 50KW

### System Diagram



## Infini HSH 3 : 3KW Single Phase



- Maximum PV Input current 13A
- Built in Wi-Fi for mobile monitoring (APP is available)
- Programmable Supply Priority for PV, Battery or Grid
- User adjustable charging current and voltage
- Programmable multiple operation modes :  
Grid-tie, Off Grid and Grid-tie with Backup
- Detachable LCD panel
- Supports USB on-the-go function
- Reserve BMS communication
- Parallel Operation upto 9 units



### Specifications

Model	Infini HSH 3 : 3KW Single Phase
Phase	1-phase/ 1-phase out
Max PV Input power	4500 W
Rated Output Power	3000 W
Max Charging power	3000W
<b>Grid Tie Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max DC Voltage	360VDC /500 VDC
Start up Voltage / Initial Feeding Voltage	120VDC/150 VDC
MPPT Voltage Range	120VDC~430VDC
Number of MPP Trackers / Max. Input Current	1/13A
<b>Grid Output (AC)</b>	
Nominal Output Voltage	220/230/240 VDC
Output Voltage Range	184-264.5 VDC OR 19.5-253 VAC (Selectable)
Nominal Output Current	13A
Power Factor	>0.99
<b>Efficiency</b>	
Maximum Conversion Efficiency (DC/AC)	95%
<b>Off-Grid Operation</b>	
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC/180VAC
Acceptable Voltage Range	90-280 VAC OR 170-280VAC
Maximum AC Input Current	40A
Frequency Range	50 Hz/60Hz (auto sensing)
<b>PV Input (DC)</b>	
Maximum DC Voltage	500VDC
MPPT Voltage range	120 VDC ~ 430 VDC
Number of MPP Trackers/ Max Input current	1/13A
<b>Battery Mode Output</b>	
Nominal Output Range	220/230/240 VAC
Output waveform	Pure Sine wave
Efficiency (DC to AC)	93%
<b>Hybrid Operation</b>	
<b>PV Input ( DC )</b>	
Nominal DC Voltage / Max. DC Voltage	360 VDC /500 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC /150 VDC
MPPT Voltage range	120VDC ~ 430 VDC
Number of MPP Trackers/ Max Input current	1/13A
<b>Grid Output (AC)</b>	
Nominal Output Current	13 A
Nominal Output Voltage	220/230/240 VAC
Output Voltage Range	184-264.5 VAC OR 19.5-253 VAC (Selectable)
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC /180 VAC
Acceptable Voltage range	90-280VAC OR 170-280 VAC
Maximum AC Input Current	30A
<b>Battery &amp; Charger</b>	
Nominal DC Voltage	48 VDC
Maximum Charging Current	60A
Maximum Solar Charging Current	60A
Maximum AC Charging Current	60A
<b>General</b>	
<b>Physical</b>	
Dimension DxWxH (mm)	140x295x468
Net Weight (Kgs)	11
<b>Interface</b>	
Communication Port	USB,RS-232,Dry Contact and WiFi
Parallel Function	Yes - 9 units
<b>Environment</b>	
Operating Humidity	0 ~ 90% RH (No Condensing)
Operating Temperature	-10°C to 50°C

Product Specifications are subject to change without further notice





## Infini HSH 6 : 6KW Single Phase



- Maximum PV Input current 27A
- Dual output for smart load management
- Built in Wi-Fi for mobile monitoring (APP is available)
- Programmable Supply Priority for PV, Battery or Grid
- User adjustable charging current and voltage
- Programmable multiple operation modes :  
Grid-tie, Off Grid and Grid-tie with Backup
- Detachable LCD panel
- Supports USB on-the-go function
- Reserve BMS communication
- Parallel Operation upto 9 units



### Specifications

Model	Infini HSH 6 : 6KW Single phase
Phase	1-phase/ 1-phase out
Max PV Input power	7000W
Rated Output Power	6000W
Max Charging power	6000W
<b>Grid Tie Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max DC Voltage	360VDC /500 VDC
Start up Voltage / Initial Feeding Voltage	120VDC/150 VDC
MPPT Voltage Range	120VDC-430VDC
Number of MPP Trackers / Max. Input Current	1/27A
<b>Grid Output (AC)</b>	
Nominal Output Voltage	220/230/240 VDC
Output Voltage Range	184-264.5 VDC OR 19.5-253 VAC (Selectable)
Nominal Output Current	26A
Power Factor	>0.99
<b>Efficiency</b>	
Maximum Conversion Efficiency (DC/AC)	95%
<b>Off-Grid Operation</b>	
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC/180VAC
Acceptable Voltage Range	90-280 VAC OR 170-280VAC
Frequency Range	50 Hz/60Hz (auto sensing)
Maximum AC Input Current	40A
<b>PV Input (DC)</b>	
Maximum DC Voltage	500VDC
MPPT Voltage range	120VDC - 430 VDC
Number of MPP Trackers/ Max Input current	1/27A
<b>Battery Mode Output(AC)</b>	
Nominal Output Range	220/230/240 VAC
Output waveform	Pure Sine wave
Efficiency (DC to AC)	93%
<b>Hybrid Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max. DC Voltage	360 VDC /500 VDC
Start-up Voltage / Initial Feeding Voltage	120VDC /150 VDC
MPPT Voltage range	120VDC - 430 VDC
Number of MPP Trackers/ Max Input current	1/27A
<b>Grid Output (AC)</b>	
Nominal Output Current	220/230/240vdc
Nominal Output Voltage	184-264.5 VAC or 19.5-253 vac (Selectable)
Output Voltage Range	26A
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC /180 VAC
Acceptable Voltage range	90-280VAC OR 170-280 VAC
Maximum AC Input Current	40A
<b>Battery Mode Output (AC)</b>	
Nominal output Voltage	220/230/240 VAC
Efficiency (AC to DC)	93%
<b>Battery &amp; Charger</b>	
Nominal DC Voltage	48VDC
Maximum Charging Current	120A
Maximum Solar Charging Current	120A
Maximum AC Charging Current	120A
<b>General</b>	
<b>Physical</b>	
Dimension DxWxH (mm)	140 x 295 x 468
Net Weight (Kgs)	14
<b>Interface</b>	
Communication Port	USB, RS -232, Dry Contact and WiFi
Parallel Function	Yes , 9 Units
<b>Environment</b>	
Operating Humidity	0 - 90% RH (No Condensing)
Operating Temperature	-10°C to 50°C

Product Specifications are subject to change without further notice



## Infini HSH 10 : 10KW Three Phase



- Modular design for easy scalable
- Suitable for wide range of inverters with 48V system
- Easy connector & floor-standing design
- Compact size and lightweight
- Easy to install on the floor
- 95% DOD high performance
- Fast charging



### Specifications

Model	Infini HSH 10 : 10KW Three Phase
Max PV Input power	14500 W
Rated Output Power	10000 W
Max Charging power	10000W
<b>Grid Tie Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max DC Voltage	720 VDC/1000 VDC
Start up Voltage / Initial Feeding Voltage	320VDC / 350 VDC
MPPT Voltage Range	350 VDC - 950 VDC
Number of MPP Trackers / Max. Input Current	2 / A:27 A, B:27A
Number of strings per MPP tracker	A:2, B:2
<b>Grid Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC
Output Voltage Range	184 - 265 VAC per phase
Nominal Output Current	14.5 per phase3A
Power Factor	0.9 lag ~ 0.9 lead
<b>Efficiency</b>	
Maximum Conversion Efficiency (DC/AC)	>96%
European Efficiency @V nominal	>95%
<b>Off-Grid Operation</b>	
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Voltage Range	170 - 290 VAC
Maximum AC Input Current	40A
<b>PV Input (DC)</b>	
Maximum DC Power	14500 W
Maximum DC Voltage	1000 VDC
MPPT Voltage range	350VDC ~ 950 VDC
Number of MPP Trackers/ Max Input current	2 / A:27 A, B:27A
Number of strings per MPP tracker	A:2, B:2
<b>Battery Mode Output</b>	
Nominal Output Range	230 VAC (P-N) / 400 VAC
Output waveform	Pure Sine wave
Efficiency (DC to AC)	91%
<b>Hybrid Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max. DC Voltage	14500 W
Start-up Voltage / Initial Feeding Voltage	320VDC / 350 VDC
MPPT Voltage range	350 VDC - 950 VDC
Number of MPP Trackers/ Max Input current	2 / A:27 A, B:27A
<b>Grid Output (AC)</b>	
Nominal Output Current	14.5 per phase
Nominal Output Voltage	230 VAC (P-N) / 400 VAC
Output Voltage Range	184 - 265 VAC per phase
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120 - 140 VAC / 180 VAC
Acceptable Voltage range	170 - 290 VAC
Maximum AC Input Current	40A
<b>Battery Mode Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC
Efficiency (DC to AC)	91%
<b>Battery &amp; Charger</b>	
Battery voltage range	40 ~ 62 VDC
Maximum Charging Current	200 A
<b>General</b>	
<b>Physical</b>	
Dimension DxWxH (mm)	255 x 660 x 750
Net Weight (Kgs)	70
<b>Interface</b>	
Communication Port	R-232, Rs485, USB, CAN and WiFi
Intelligent Slot	Optional for SNMP and Modbus cards
<b>Environment</b>	
Operating Humidity	0 ~ 100% RH (No condensing)
Operating Temperature	-25°C to 60°C > 45°C power derating
Altitude	0 ~ 1000 m

Product Specifications are subject to change without further notice



## Infini HSH 15 : 15KW Three Phase



- IP65 waterproof and dustproof makes the inverter available for various working conditions.
- Dual output for smart load control
- Self-consumption and feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- Built-in communication port for BMS (RS485), Wi-Fi
- User-adjustable charging current and voltage
- Programmable multiple operation modes:  
Grid-tie, off-grid and grid-tie with backup
- Parallel operation up to 9 units



### Specifications

Model	Infini HSH15 : 15KW Three phase
Max PV Input power	22500
Rated Output Power	15000
Max Charging power	15000
<b>Grid Tie Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max DC Voltage	720 VDC / 1000 VDC
Start up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC
MPPT Voltage Range	350 VDC ~ 950 VDC
Number of MPP Trackers / Max. Input Current	A:2/A:26A, B:26A
Number of Strings Per MPP Tracker	A:2, B:2
<b>Grid Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184-265 VAC per phase
Nominal Output Current	21.7A per phase
Power Factor Range	0.9 lag ~ 0.9 lead
<b>Efficiency</b>	
Maximum Conversion Efficiency (DC/AC)	>96%
European Efficiency @V nominal	>95%
<b>Off-Grid Operation</b>	
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120 -140 VAC /180 VAC
Acceptable Voltage Range	170 -290 VAC per phase
Maximum AC Input Current	40A
<b>PV Input (DC)</b>	
Maximum DC Power	22500 W
Maximum DC Voltage	1000 VDC
MPP Voltage Range	350 VDC ~ 950VDC
No. of MPP Trackers / Max. Input Current	2/A:26A, B:26A
Number of Strings Per MPP Tracker	A:2, B:2
<b>Battery Mode Output(AC)</b>	
Nominal Output Range	230 VAC (P-N) / 400 VAC (P-P)
Output waveform	Pure Sine wave
Efficiency (DC to AC)	91%
<b>Hybrid Operation</b>	
<b>PV Input (DC)</b>	
Max DC Voltage	1000VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC/ 350 VDC
MPPT Voltage range	350 VDC ~ 950VDC
Number of MPP Trackers/ Max Input current	2/A:26A, B:26A
Number of Strings Per MPP Tracker	A:2, B:2
<b>Grid Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184-265 VAC per phase
Nominal Output Current	21.7 A per phase
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC /180 VAC
Acceptable Voltage range	170-290VAC Per phase
Maximum AC Input Current	40A
<b>Battery Mode Output (AC)</b>	
Nominal output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (AC to DC)	91%
<b>Battery &amp; Charger</b>	
Battery Voltage range	40 ~ 62 VDC
Maximum Charging Current	300 A
<b>General</b>	
<b>Physical</b>	
Dimension DxWxH (mm)	255 x 660 x750
Net Weight (Kgs)	78
<b>Interface</b>	
Communication Port	RS -232, RS-485, USB, CAN and WiFi
Intelligent Slot	Optional for SNMP and Modbus cards
<b>Environment</b>	
Operating Humidity	0 ~ 100 % RH ( Non condensing)
Operating Temperature	-25oC to 60oC, >45oC Power derating
Altitude	0 ~ 1000m
<b>Protection &amp; Certifications</b>	
Safety	IEC 62109,IEC 62116, IEC 61727, IEC 61683
Grid Connection Standard	NRS097-2-1:2017VDE-AR-N4105

Product Specifications are subject to change without further notice



## Infini HSH 30 : 30KW Three Phase



- IP 65 waterproof and dust proof
- Built in third generation SIC MOSFET improves efficiency
- Accept dual AC inputs, utility power and generator power
- Built-in Wi-Fi for mobile monitoring
- User adjustable charging current upto 50A
- Wide Battery input range
- Built-in communication port
- Parallel operation upto 4 units



### Specifications

Model	Infini HSH 30 : 30KW Three phase
Max PV Input power	40000 W
Rated Output Power	30000 W
Max Charging power	30000 W
<b>Grid Tie Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max DC Voltage	720 VDC /1000 VDC
Start up Voltage / Initial Feeding Voltage	320VDC/350VDC
MPPT Voltage Range	350 VDC ~ 950 VDC
Number of MPP Trackers / Max. Input Current	3/A:26A, B:26A, C:26A, D:26A
Number of Strings Per MPP Tracker	A:2, B:2,C:2,D:2
<b>Grid Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184-265 VAC per phase
Nominal Output Current	43.5 A per phase
Power Factor Range	0.9 lag ~ 0.9 lead
<b>Efficiency</b>	
Maximum Conversion Efficiency (DC/AC)	96.50%
European Efficiency @V nominal	96%
<b>Off-Grid Operation</b>	
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC /180 VAC per phase
Acceptable Voltage Range	170-260 VAC per phase
Maximum AC Input Current	50A
<b>PV Input (DC)</b>	
Maximum DC Power	1000VDC
Maximum DC Voltage	320 VDC ~ 350 VDC
No. of MPP Trackers / Max. Input Current	3/A:26A, B:26A, C:26A
<b>Battery Mode Output(AC)</b>	
Nominal Output Range	230 VAC (P-N) / 400 VAC (P-P)
Output waveform	Pure Sine wave
Efficiency (DC to AC)	97%
<b>Hybrid Operation</b>	
<b>PV Input ( DC)</b>	
Max DC Voltage	1000VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC /340 VDC
MPPT Voltage range	320 VDC ~ 350 VDC
Number of MPP Trackers/ Max Input current	3/A:26A, B:26A, C:26A
<b>Grid Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184-265 VAC per phase
Nominal Output Current	43.5 A per phase
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC /180 VAC per phase
Acceptable Voltage range	170-260 VAC per phase
Maximum AC Input Current	50A
<b>Battery Mode Output (AC)</b>	
Nominal output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (AC to DC)	97%
<b>Battery &amp; Charger</b>	
Battery Voltage range	500 ~ 900 VDC
Maximum Charging Current	50 A
<b>General</b>	
<b>Physical</b>	
Dimension DxWxH (mm)	255 x 660 x 750
Net Weight (Kgs)	73
<b>Interface</b>	
Communication Port	RS-232, USB, Dry contact, RS-485, WiFi
Intelligent Slot	Optional SNMP and MODBUS
<b>Environment</b>	
Operating Humidity	0 ~ 100% RH
Operating Temperature	-25oC to 60oC. ( >45oC Power derating)
Altitude	0 ~1000m
<b>Protection &amp; Certifications</b>	
Safety	IEC 61000,EN 62690, IEC 62109, IEC 62477
Grid Connection Standard	NRS097-2-1:2017,VDE-AR-N4105, G99, IEC 61727, IEC 62116

Product Specifications are subject to change without further notice.





## Infini HSH 50 : 50KW Three Phase



- IP 65 waterproof and dust proof
- Built-in Wi-Fi for mobile monitoring
- Generator input compatible
- User adjustable charging current upto 50A
- Wide Battery input range
- Built-in communication port for BMS ( RS-485 and CAN )
- Parallel operation upto 4 units
- 5 years warranty



### Specifications

<b>Model</b>	Infini HSH 50 : 50KW Three Phase
Max PV Input power	65000 W
Rated Output Power	50000 W
Max Charging power	50000 W
<b>Grid Tie Operation</b>	
<b>PV Input (DC)</b>	
Nominal DC Voltage / Max DC Voltage	720 VDC / 1000 VDC
Start up Voltage / Initial Feeding Voltage	320VDC/350VDC
MPPT Voltage Range	350 VDC ~ 950 VDC
Number of MPP Trackers / Max. Input Current	4/A:32A, B:32A, C:32A, D:32A
Number of Strings Per MPP Tracker	A:2, B:2,C:2,D:2
<b>Grid Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184-265 VAC per phase
Nominal Output Current	47.5 ~ 51.5 Hz or 59.3 ~ 60.5 Hz
Power Factor Range	0.9 lag ~ 0.9 lead
<b>Efficiency</b>	
Maximum Conversion Efficiency (DC/AC)	96.50%
European Efficiency @V nominal	96%
<b>Off-Grid Operation</b>	
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC /180 VAC per phase
Acceptable Voltage Range	170-260 VAC per phase
Maximum AC Input Current	83A
<b>PV Input (DC)</b>	
Maximum DC Power	1000VDC
Maximum DC Voltage	350 VDC ~ 900 VDC
No. of MPP Trackers / Max. Input Current	4/A:32A, B:32A, C:32A, D:32A
<b>Battery Mode Output(AC)</b>	
Nominal Output Range	230 VAC (P-N) / 400 VAC (P-P)
Output waveform	Pure Sine wave
Efficiency (DC to AC)	97%
<b>Hybrid Operation</b>	
<b>PV Input ( DC)</b>	
Max DC Voltage	1000 VDC
Start-up Voltage / Initial Feeding Voltage	320VDC/350VDC
MPPT Voltage range	350 VDC ~ 900 VDC
Number of MPP Trackers/ Max Input current	4/A:32A, B:32A, C:32A, D:32A
<b>Grid Output (AC)</b>	
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range	184-265 VAC per phase
Nominal Output Current	73A
<b>AC Input</b>	
AC Start-up Voltage /Auto Restart Voltage	120-140 VAC /180 VAC per phase
Acceptable Voltage range	170-260 VAC per phase
Maximum AC Input Current	83A
<b>Battery Mode Output (AC)</b>	
Nominal output Voltage	230 VAC (P-N) / 400 VAC (P-P)
Efficiency (AC to DC)	97%
<b>Battery &amp; Charger</b>	
Battery Voltage range	500 ~ 800VDC
Maximum Charging Current	65A
<b>General</b>	
<b>Physical</b>	
Dimension DxWxH (mm)	268 x 660 x 750
Net Weight (Kgs)	110
<b>Interface</b>	
Communication Port	RS-232,USB,dry contact, RS-485, CAN, WIFI, Bluetooth
Intelligent Slot	Optional SNMP and MODBUS
<b>Environment</b>	
Operating Humidity	0~100%RH
Operating Temperature	-25oC to 60oC, >45oC Power derating
Altitude	0 ~1000m
<b>Protection &amp; Certifications</b>	
Safety	IEC 61000,EN 62690, IEC 62109, IEC 62477
Grid Connection Standard	NRS097-2-1:2017,VDE-AR-N4105, G99, IEC 61727, IEC 62116

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## Paralleling of Inifini - Hykon Solar Hybrid Inverters

- 1 Inverters can have their capacities increased by paralleling with one another.
- 2 Up to 9 nos can be paralleled with 3KW and 6KW. It is possible to parallel up to 4 nos. with 10, 15, 30, and 50 KW.
- 3 A single battery pack can power a parallel inverter.
- 4 Single-phase inverters can be converted to three-phase inverters by paralleling them.
- 5 Every Inverter needs its own Parallel card in order to parallel

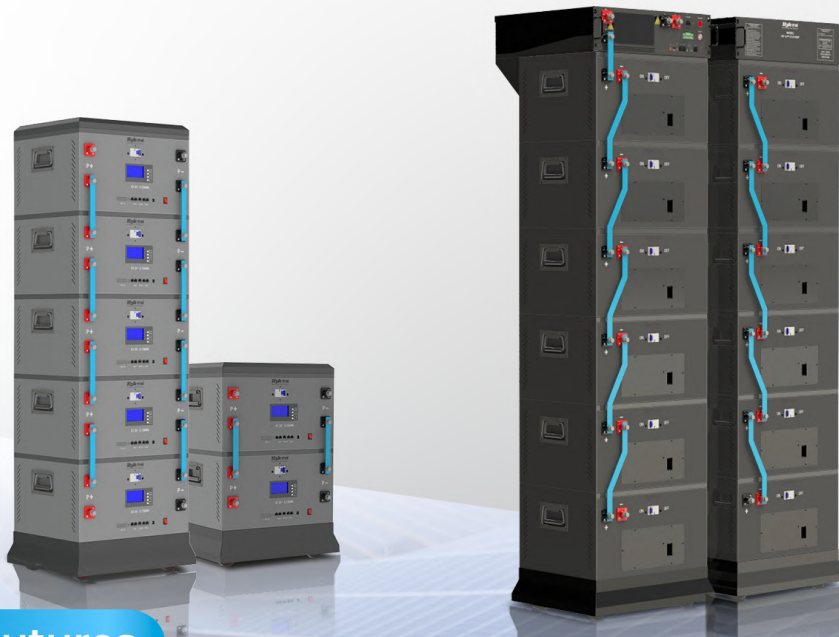
Paralleling of Inifini	Capacity	Connection Diagram
3KW + 3KW	6KW Single Phase	<p>3kW X 2NO'S - 6kW 1Ø</p>
3KW + 3KW + 3KW	9KW - Single Phase	<p>3kW X 3NO'S - 9kW 1Ø</p>
3KW on each Phase	9KW - Three Phase	<p>3kW X 3NO'S - 9kW 3Ø</p>





## LiMax - Lithium Battery Pack

- 1 **LiMax 5** - Low Voltage LFP Battery Pack: 5.12 KWH
- 2 **LiMax 61** - High Voltage LFP Battery Pack: 61.5 KWH



### Features



#### Compact size and light weight

Built-in Lithium Iron Phosphate (LFP) cell with less space and weight



#### Fast charging

Battery module can be fully charged in shorter time



#### Maximum Lifecycle

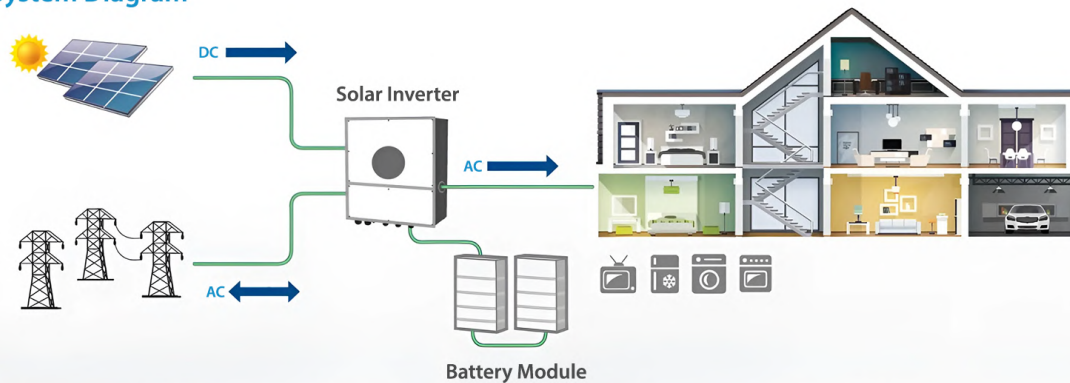
8000 cycles is for 60% of DOD with >50% capacity  
6000 cycles is for 80% of DOD with >80% capacity  
4000 cycles is for 90% of DOD with >80% capacity



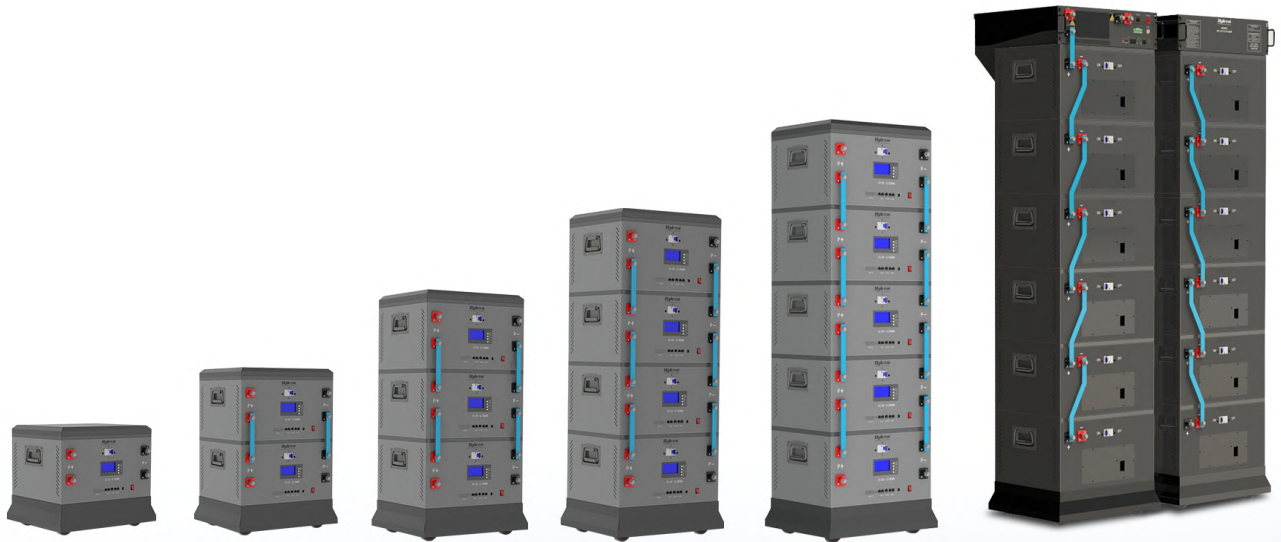
#### Modular design for easy scalable

Battery module can be easily stacked and added for energy expansion

### System Diagram



## Technical Selection Guide



Battery Model	LiMax 5					LiMax 61
Cell Type	Lithium Ferro Phosphate ( LFP )					
V/AH/KWH	51.2VDC / 100AH / 5.12KWH					615VDC / 100AH / 61.5KWH
No. of Modules	1	2	3	4	5	12
Discharge Current	100A	200A	300A	300A	300A	100A
Peak Discharge current (60sec) (A)	150A	350A	450A	450A	450A	150A
Operating VDC	40-56	40-56	40-56	40-56	40-56	480-670
Charging Current(A)	60-100	60-100	100-300	100-300	100-300	60-100
Dimension [D x W x H mm]	405-495-430	405-495-695	405-495-960	405-495-1225	405-495-1490	540-482-1855
Weight	51	102	153	204	255	650
<b>Selection of LiMax for Infini</b>						
Hybrid Inverter LiMax	3KW, 6KW	6KW, 10KW, 10KW	6KW, 10KW, 15KW	6KW, 10KW, 15KW	10KW, 15KW	30KW, 50 KW

## General Specifications

Operating Temperature	0°C – 50°C
Storage Temperature	<18 months: 20°C -25 °C
	<2 months : 20°C -45 °C
	<1 month : 40°C -50 °C
Recommended Storage	20°C ± 5 °C
IP Protection	IP 20
Communication	RS485/RJ45/CAN

Product Specifications are subject to change without further notice





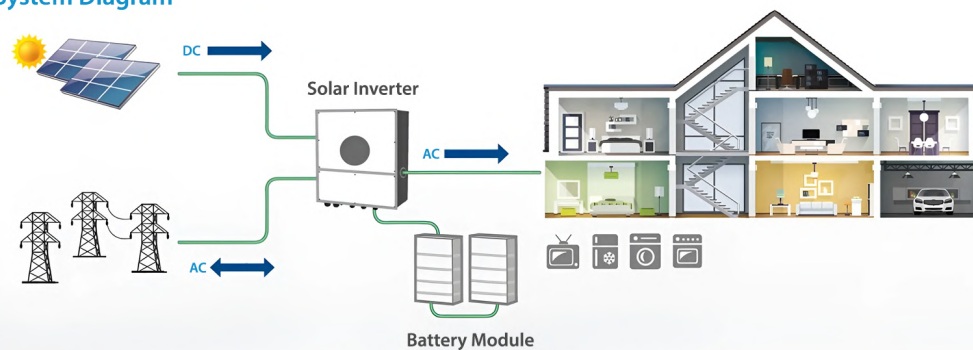
## LiMax 61



- Lithium-Ion Phosphate (LFP) cell guarantees safety and reliability
- Parallel Operations up to 5 units of Energy expansion
- Suitable for wide range of solar Inverters with High Voltage
- Compact Size and Lightweight
- Built-in Lithium-Ion Phosphate cells with less space and weight
- Modular design for easy scalable
- Battery Module can be easily stacked and added for energy expansion
- Fast Charging
- Battery module can be fully charged in shorter time

Model Name	LiMax-61	
Single Battery Module	HLH 05 ( 51.2V/100AH,5.12KWH)	
No. of Modules	12	
<b>Parameters</b>		
Nominal Voltage	614 VDC	
Full Charge Voltage (FC)	672 VDC	
Typical Capacity	100 AH	
Typical Energy	61.5KWh	
Max. Continuous Discharging Current	100A	
Max. Peak Discharging Current	150A	
Protection	BMS & Circuit Breaker	
Charge Current	50A	
Max. Charge Current	100A	
Standard Charge Method	0.2 CC ( Constant Current ) charge to FC CV ( Constant Voltage FC) change till charge current decline to <0.05C	
Cycle Life	6000 cycles is for 80% of DOD with >80% capacity	
Inner Resistance	≤ 20m Ohm	
Operating temp	Charge	0°C ~55°C
	Discharge	0°C ~55°C
Compliance Safety	IEC 62619, UN38.3	
<b>Physical</b>		
Single Battery Module	Dimension D x W x H (mm)	370-460-280
	Net weight (Kg)	51
Controller box	Dimension D x W x H (mm)	540-495-200
	Net weight (Kg)	6.5
Complete Set	Dimension D x W x H (mm)	220x630x1280 and 220x630x1070
	Net weight (Kg)	650

### System Diagram





### **Today for Tomorrow**

At Hykon, we believe the future is built today. We're inspired by your experiences to innovate and develop solutions that meet your evolving needs continuously. Our focus isn't just on delivering exceptional power electronics and green energy products, but on creating a better tomorrow for you and your family.

With over three decades of experience serving multiple large-scale businesses across various industries, we have a proven track record of delivering reliable and efficient power solutions. Our team of experts works closely with clients to understand their unique requirements and provide customized solutions that exceed their expectations.

Our commitment to quality, innovation, and customer satisfaction has enabled us to build long-lasting relationships with our clients. By choosing Hykon, you're choosing a partner dedicated to building a brighter, more sustainable future.

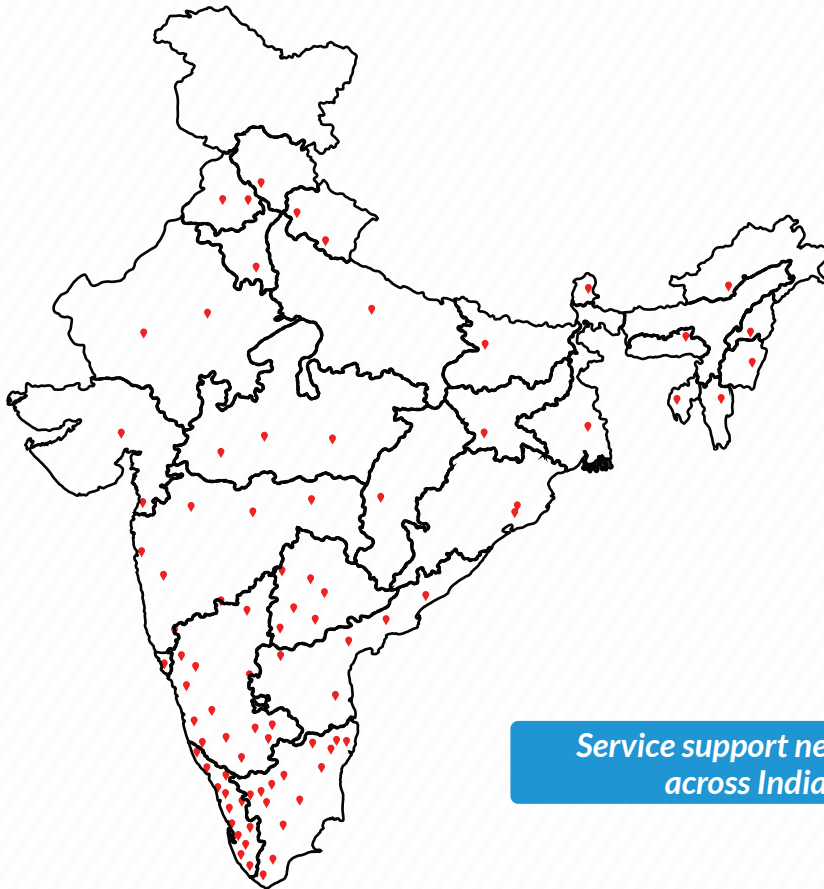
**Why  
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**Bangalore Regional office :**

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