

Energy Storage System

30kw hybrid solar inverter with High-Voltage 30kWh Lithium-ion battery modules



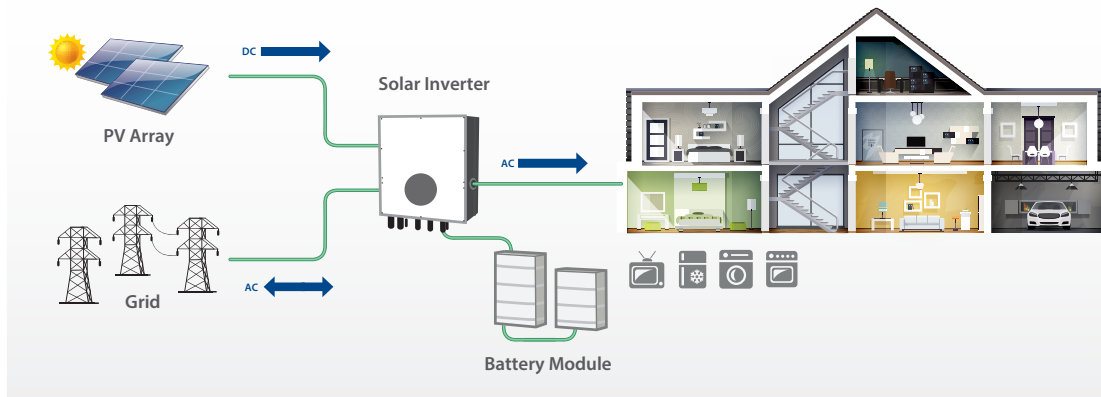
Lithium Iron Phosphate (LFP)
Battery Pack



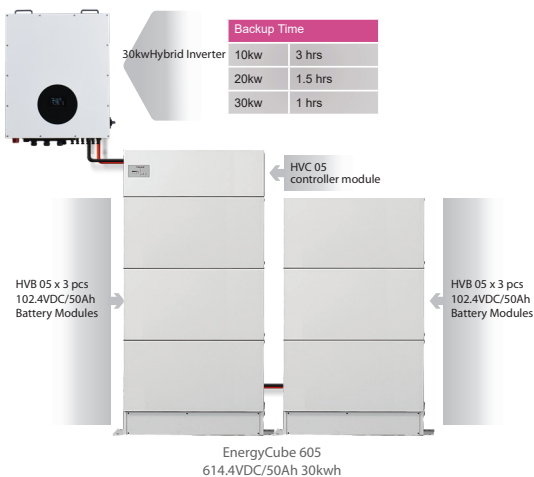
EnergyCube 605
(30kwh)

- IP65 enclosure for hybrid inverter
- Enhance AC/Solar charger to 50A, shorten charging time in one hour
- Parallel operation up to 4 units
- Dual outputs for smart load management
- 150% unbalanced load support
- Built-in WiFi for mobile monitoring (App is available)
- Wide battery input range
- Built-in communication port for BMS (RS485)
- Self-consumption and feed-back to the grid
- Programmable supply priority for PV, battery or Grid
- Programmable multiple operation modes: Grid-tie, off-grid and grid-tie with backup
- Built-in timer for various mode of on/off operation
- Lithium Iron Phosphate (LFP) cell
- Scalable Li-Ion battery expansion

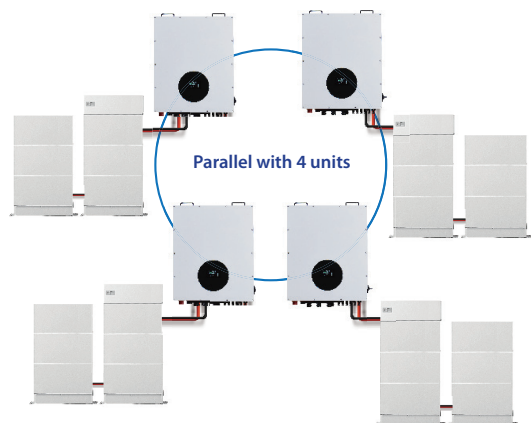
System Diagram



30kW hybrid inverter with EnergyCube 605



Parallel operation



Energy Storage System Specification

INVERTER MODEL		InfiniSolar WP 30kw
Maximum PV Input Power		40,000 W
Rated Output Power		30,000 W
Maximum Charging Power		30,000 W
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage		720 VDC / 1000 VDC
Start-up Voltage / Initial Feeding Voltage		320 VDC / 350 VDC
MPP Voltage Range		350 VDC ~ 900 VDC
Number of MPP Trackers / Maximum Input Current		3 / A: 26A, B: 26A, C: 26A
GRID OUTPUT		
Nominal Output Voltage		230 VAC (P-N) / 400 VAC (P-P)
Output Voltage Range		184 - 265 VAC per phase
Max. Output Current		43.5 A per phase
Maximum Conversion Efficiency (DC/AC)		96.5%
European Efficiency @ Vnominal		96%
AC INPUT		
AC Start-up Voltage / Auto Restart Voltage		120 - 140 VAC per phase / 180 VAC per phase
Acceptable Input Voltage Range		170 - 280 VAC per phase
Maximum AC Input Current		50 A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage		230 VAC (P-N) / 400 VAC (P-P)
Maximum Conversion Efficiency (DC/AC)		96%
BATTERY & CHARGER		
Nominal DC Voltage		500 ~ 800 VDC
Maximum Charging Current		50 A
PHYSICAL		
Dimension, D x W x H (mm)		255 x 660 x 750
Net Weight (kgs)		73

BATTERY MODEL		EnergyCube 605
CONTROLLER BOX MODULE		HVC 05
SINGLE BATTERY MODULE		HVB 05 (102.4V/50Ah, 5120Wh)
NUMBERS OF MODULES		6
PARAMETERS		
Nominal Voltage		614.4VDC
Full Charge Voltage (FC)		691.2VDC
Full Discharge Voltage (FD)		537.6VDC
Typical Capacity		50Ah
Typical Energy		30kwh
Max Continuous Discharging Current		60A
Max Peak Discharging Current		75A
Protection		BMS & Circuit Breaker
Charge Voltage		672VDC
Charge Current		10A
Maximum Charge current		25A
Standard Charge Method		0.2C CC (Constant current) charge to FC, CV (Constant voltage FC) charge till charge current decline to <0.05C
Cycle Life		6000 Cycles @>80% capacity
Inner Resistance		≤20m ohm
Operating Temperature	Charge	0°C~55 °C
	Discharge	0°C~55 °C
Compliance Safety		IEC 62619, UN38.3
PHYSICAL		
Single Battery Module	Dimension, D x W x H (mm)	220 x 630 x 320
	Net Weight(Kg)	51.3
Controller Box	Dimension, D x W x H (mm)	220 x 630 x 210
	Net Weight(Kg)	9.95
Complete Set	Dimension, D x W x H (mm)	220 x 630 x 1280 & 220 x 630 x 1070
	Net Weight(Kg)	328

Product specifications are subject to change without further notice.