

COMMERCIAL HYBRID

30KW-50KW-100KW-120KW-150KW

Product Benefits

- Become completely energy independent
- Reduce the burning of fossil fuels for a healthier environment
- Eliminate the problems of grid blackouts

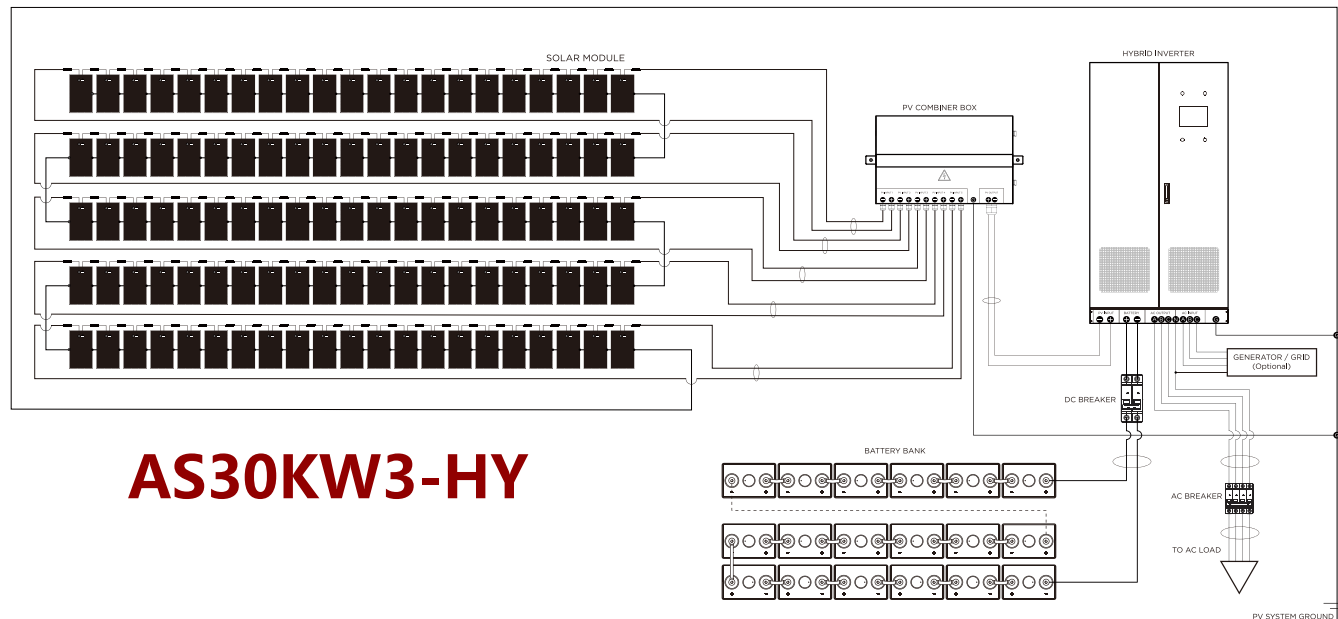


PV Kits Include

- Solar modules
- Hybrid solar inverter
- Battery bank
- PV combiner box
- Custom mounting system
- PV battery bank & ground wiring harnesses
- Wire management kits

Common Application

- Installation sites where bringing in the electricity from the grid is too expensive or difficult
- Locations where liquid fuel costs are too high or difficult to maintain
- Those looking to be completely independent from the grid
- Those who cannot afford to lose power or have power outages

**AS30KW3-HY**

PRODUCT MODEL	AS30KW3-HY	AS50KW3-HY	AS100KW3-HY	AS120KW3-HY	AS150KW3-HY
PV System Size Nominal(kWp)	30	50	100	120	150

PV MODULE SPECIFICATIONS(*Mono)

Power (W)	580
Vmp (V)	43.86
Voc (V)	53.05
Isc (A)	13.78
Imp (A)	13.23
Dimensions (L x W x H)(mm)	2279*1134*30
PV Module weight (kg)	22.44
Certifications	CE / TUV(IEC 61215 & IEC61730) / UL (UL1703)
*Polycrystalline PV modules also available up on request	

INVERTER SPECIFICATIONS

Rated Output Power (KW)	30	50	100	120	150
Apparent Power (KVA)	33	55	110	132	165
Transformer	Yes				
AC Voltage	360-440				
AC Frequency (Hz)	50 / 60				
Battery Voltage (V)	512				
MPPT Charge Current (A)	100	150	300	340	425
PV Input Power (W)	30000	50000	100000	120000	150000
PV MPP Voltage Range (V)	480-800				
Protections	Input over/under voltage, output over/under voltage, overload, short circuit over temperature, reverse polarity, lightning surge protection				
Standby Consumption	< 30W				
Display	Touch Screen				
Dimensions (W x H x D)(mm)	700 x 600 x 1660	950 x 750 x 1860	1200 x 800 x 1900	1200 x 800 x 1900	1400 x 800 x 1900
Inverter Weight (kg)	355	610	948	1024	1250

BATTERY BANK SPECIFICATIONS

Battery Type	Lead Acid Gel				
Battery Voltage (V)	2				
Battery Bank Voltage (V)	512				
*Battery Current (Ah)	100	150	200	250	300
*Battery Bank Current (Ah)	100	150	200	250	300
*Battery Bank Power - Total (Wh)	51200	76800	102400	128000	153600
*Battery Bank Power - 50% DOD (Wh)	25600	38400	51200	64000	76800
Battery Dimensions (L x W x H)(mm)	172.5 x 110 x 351	211 x 176 x 353	302 x 175 x 353	408 x 175 x 353	475 x 174 x 351
Battery Weight(kg)	14	26	37	50	62
Full Cycles (50% DOD)	1800				
Total Batteries - *storage can be increased	210				
Connection	Series				
Certifications	CE / RU / ISO 14001 / OHSAS 18001				
*Battery capacity is shown for reference only actual capacity should be designed based on the actual power usage.					

BOS

PV Combiner Box (Type / #)	4 to 1/1	7 to 1/1	16 to 1/1	10 to 1/2	12 to 1/2
*PV Wire Harness - 4mm² (m)	500	800	1600	2000	2400
*DC Wire(Combiner Box to Inverter)	16m² / 100m	25m² / 100m	35m² / 100m	25m² / 100m	25m² / 100m
*Ground Wire - 4mm² (m)	100	200	400	500	600
PV Mounting System	Customized				
Battery Bank Rack	Customized				

SYSTEM LAYOUT

Number of Modules	52	91	182	220	288
Number of Inverters	1	1	1	1	1
PV Array Surface Area (m ²)	144.72	253.	470.	714	856.8
PV Array Weight (kg)	1602	26280	35520	7812	39374.4
PV Module String Configuration 600VDC	No. of PV Modules/ String	13	13	14	11
	Total Strings	4	7	13	20
	String Voc(V)	698.6			
	String Vmp (V)	587.44			
		String Imp (A)			
		13.11			

PRODUCTION ESTIMATES (kWh AC)

*Projectd Yearly Output at 4 PSH/ Day	120.60	211.12	422.24	510.40	668.16
*Projectd Yearly Output at 5 PSH / Day	150.80	263.90	527.80	638.00	835.20
*Projectd Yearly Output at 6 PSH/ Day	180.96	316.68	633.36	765.60	1002.24

*Based on 85% system efficiency (formula = DC Power x Peak Sunshine Hours / Day x System Efficiency) (PSH = Peak Sunshine Hours)

SYSTEM OPTIONS

Monitoring Device	RS485
PV Module Type	Monocrystalline or Polycrystalline 60 / 72 Cells
Mounting System Types	Metal Roof, Asphalt Shingle, Tile Roof, Tin Roof, Flat Concrete, Ground
AC Back up Input	Power Generator / Utility Grid
Battery	12V Gel / 2V GEL / Tubular Gel (OPzV)

*Specs are subject to change without further notification