

Products & Service

Contents

➔ Hybrid/Off-grid PV Inverter

- ➔ Hybrid/Off-grid Systems
- ➔ Features
- ➔ Specification
- ➔ Applications

➔ PV LED Controller

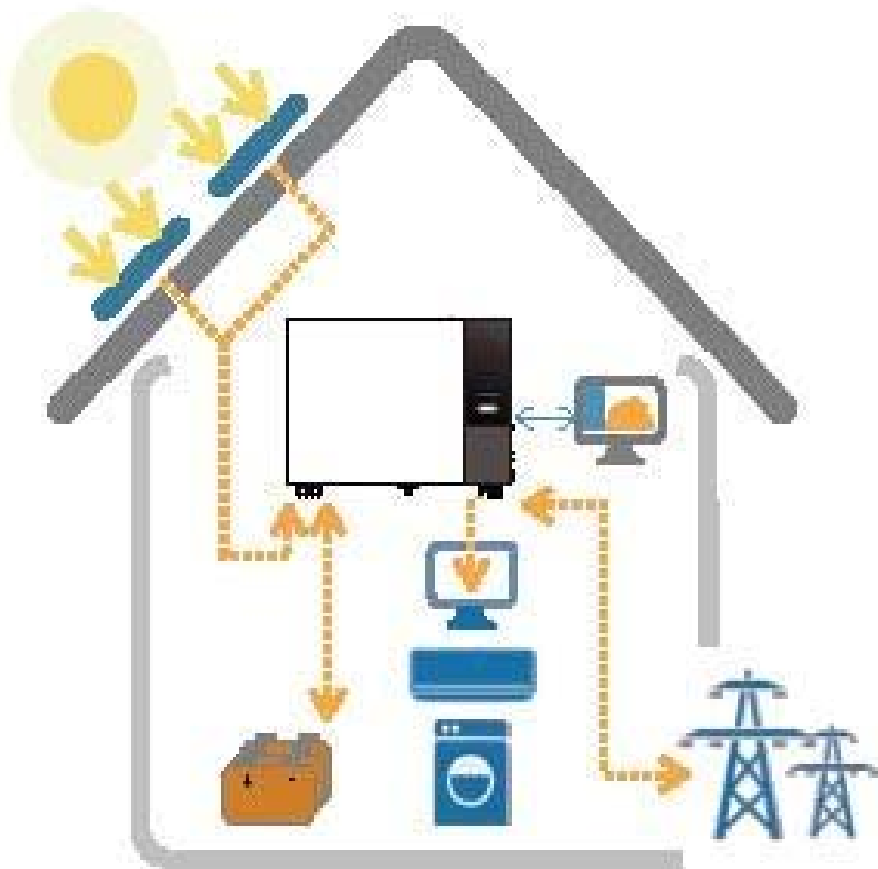
- ➔ Working & Connection
- ➔ Features
- ➔ Specification

➔ Industrial PV Hybrid System

- ➔ Problems in Your Plant?
- ➔ System Configuration
- ➔ Features

➔ About US

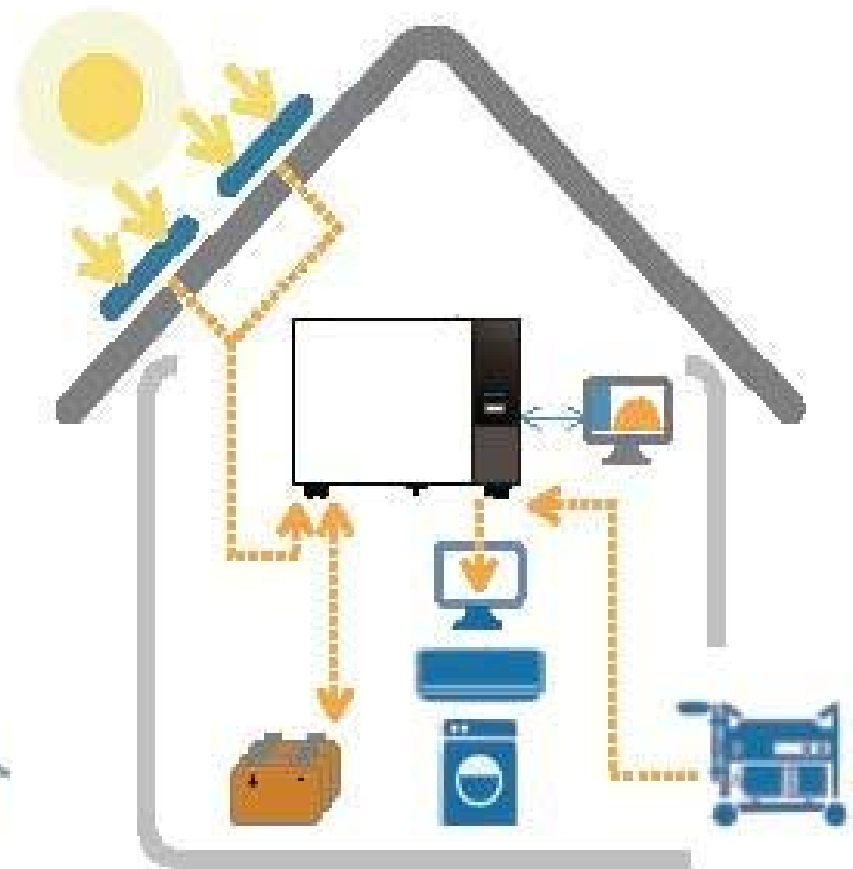




Hybrid PV System*

- ➔ Supplying loads from PV and/or grid
- ➔ Feed-in surplus PV or None to grid
- ➔ Providing power during blackout

*-D models only

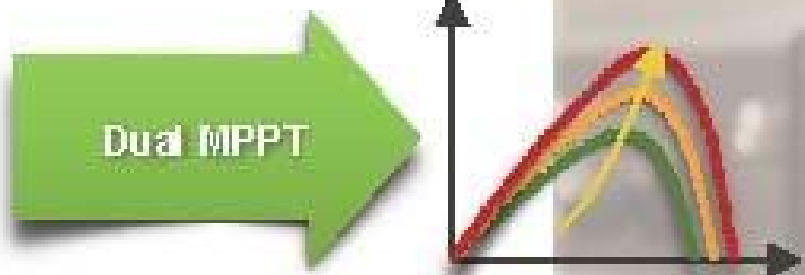


Off-grid PV System

- ➔ Supplying loads from PV and/or battery
- ➔ Charging battery with surplus PV power
- ➔ Generator as the backup

Hybrid/Off-grid PV Systems

Features



* Available for -D models



Specification

Model		LVS-30M/LVS-30MD		LVS-50M/LVS-50MD	
Input (PV)					
Max. Power	W	3600		6000	
MPPT Range	V	150 ~ 500		150 ~ 450	
Max. Voltage	V	550		500	
Max. Current	A	10		10 x 2	
MPP Tracker Number		1		2	
Input (AC)					
Nominal Voltage, Frequency	V/Hz	230, 50/60			
Max. Voltage	V	300			
Maximum Current	A	15		25	
Input (Battery)					
Nominal Voltage	V	48		48	
Max. Charging Current	A	60		100	
Output (AC)					
Nominal Power	W/VA	3000		5000	
Nominal Voltage, Frequency	V/Hz	230, 50/60			
Over-Load Capacity	%	200			
Waveform		Pure Sinusoidal			

General			
Temperature Range	°C	-20 ~ 55 ¹	
Environment		Indoor (IP20)	
Cooling		Forced Air-Cooling	
Humidity	%	0 ~ 95, non-condensing	
Battery Type		Lead-Acid or LiFePO ₄ , 40~1000Ah	
Interface & Mechanical			
Display		16 x 2 Text Display	
Communication Interface		RS485, USB and Generator remote control	
Dimension (W / H / D)	mm	580/408/168	580/408/168
Weight	kg	22	23.8
Installation		Wall / Rack Mount	
Certificate and Regulation ²			
Safety		IEC 62109-1 & IEC 62109-2	
EMC		IEC/EN 61000-3-2	IEC/EN 61000-3-11
		IEC/EN 61000-3-3	IEC/EN 61000-3-12
		IEC/EN 61000-6-2, IEC/EN 61000-6-4	
Grid Monitoring (-D model)		VDE 0126-1-1/A1	

1. For T>40°C, AC power may need to be reduced 2. The design meets listed safety and EMC standards. Third party certificate is upon request
3. Specifications are subject to change without prior notice.

Applications

No/Unstable Utility

- ➔ Rural areas, islands
- ➔ Utility is not available/stable
- ➔ Diesel fuel is expensive
- ➔ PV is main source
- ➔ Large battery bank
- ➔ Diesel generator as backup

Expensive Elec. Fee

- ➔ Urban areas
- ➔ High electricity cost
- ➔ Feed in tariff is available
- ➔ Grid feed-in (D model)
- ➔ Solar & grid supply power
- ➔ Smaller PV and battery

Indep. Power Station

- ➔ Mobile, Radio stations
- ➔ No utility
- ➔ Premium power required
- ➔ Minimum maintenance
- ➔ Larger PV and battery
- ➔ Diesel generator as backup



Features

- ☐ MPPT
- ☐ All in One
- ☐ 95%+ Efficiency
- ☐ IP65, Die-casting Case
- ☐ Customized on your Applications
- ☐ Programmable Brightness v.s. Time



Specification

Model		PC-60N-U24/U24H	PC-80N-U24/U24H	PC-100N-U24/U24H
Input (PV)				
Max. Power	W	360		
Nominal Voltage	V	18 for U24; 30 for U24H		
Max. Voltage	V	30 for U24; 50 for U24H		
Max. Current	A	20 for U24; 10 for U24H		
MPP Tracker		Yes		
Input/Output (Battery)				
Nominal Voltage	V	24		
Max. Voltage	V	29		
Maximum Chg. Current	A	15	15	15
Protection		OVP, OCP, Over Charge/Discharge		
Output (LED)				
Nominal Power	W	60	80	100
Nominal Voltage	V	20	20	20
Max. Current	A	3	4	5
Current Regulation	%	±1		
Protection		Short Circuit, OVP, OCP		

Specification

Model		LC-60N	LC-80N	LC-100N
Input (PV)				
Max. Power	W		360	
Nominal Voltage	V		18 for U24; 30 for U24H	
Max. Voltage	V		30 for U24; 50 for U24H	
Max. Current	A		20 for U24; 10 for U24H	
MPP Tracker			Yes	
Input/Output (Battery)				
Nominal Voltage	V		24	
Max. Voltage	V		29	
Maximum Chg. Current	A	15	15	15
Protection		OVP, OCP, Over Charge/Discharge		
Output (LED)				
Nominal Power	W	60	80	100
Nominal Voltage	V	20	20	20
Max. Current	A	3	4	5
Current Regulation	%	±1		
Protection		Short Circuit, OVP, OCP		

Model		LC-60N	LC-80N	LC-100N
General				
Temperature Range	°C		-10 ~ 50	
Environment			Outdoor	
Cooling			Convection	
Humidity	%		0 ~ 100	
Battery Type			Lead-Acid/LiFePO ₄	
Efficiency	%		95 (PV/BAT), 95 (BAT/LED)	
Power Saving Mode			Yes, by reducing LED current	
Mechanical				
Casing			Die-casting Aluminum case	
Protection			IP65	
Dimension (W / H / D)	mm		147/92/55	
Weight	kg		1.9	
Regulation¹				
Safety			CE	
EMC			EN 55015, EN 61547, EN 61000-4-2, 3, 6, 8, Class A Light Industry	

1. The design meets listed safety and EMC standards. Third party certificate is upon request
2. Specification other than above is upon request
3. Specifications are subject to change without prior notice.



Production Losses

- Blackouts
- Insufficient Power
- Unstable Electricity

High Electricity Cost

- Utility is expensive
- Diesel is expensive
- Energy cost is higher and higher



Power Problems

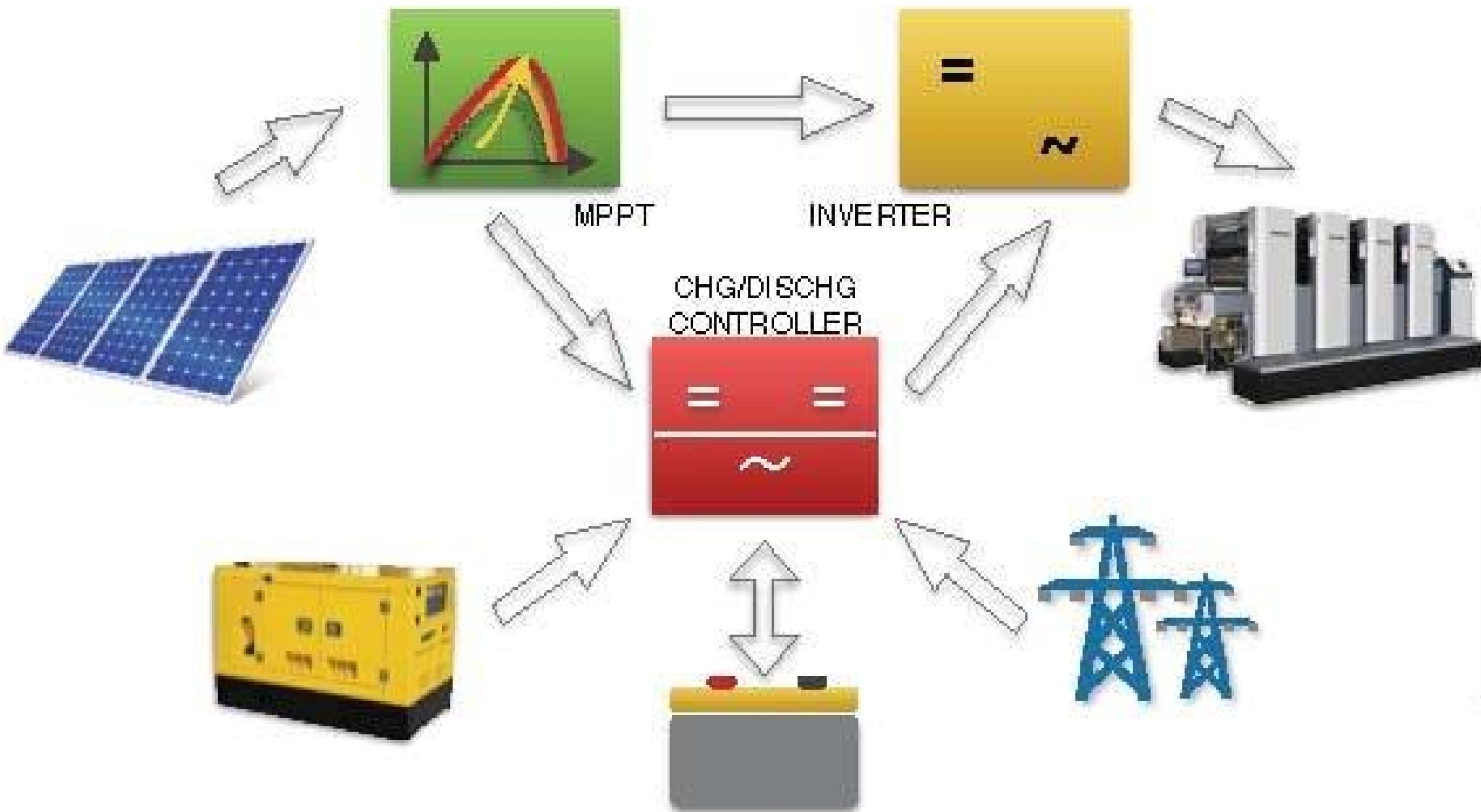
- Surges
- Brownouts
- High Voltages

Generator Troubles

- Noisy
- Fuel Adding
- Frequent Maintenance



Problems in Your Plant ?



Industrial Hybrid PV System

System Configuration

Features

- ➔ Solar Power from \$0.1/kWh
- ➔ Flexible Battery Size from ZERO
- ➔ High Efficiency
- ➔ Automatic Charge Control
- ➔ Customized on your Facility
- ➔ 200% Over-load Capability
- ➔ Power Range from 100 to 800k VA



About





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