



Integrated

Outdoor Solar Power System

3KW/5KW 2.56KWH

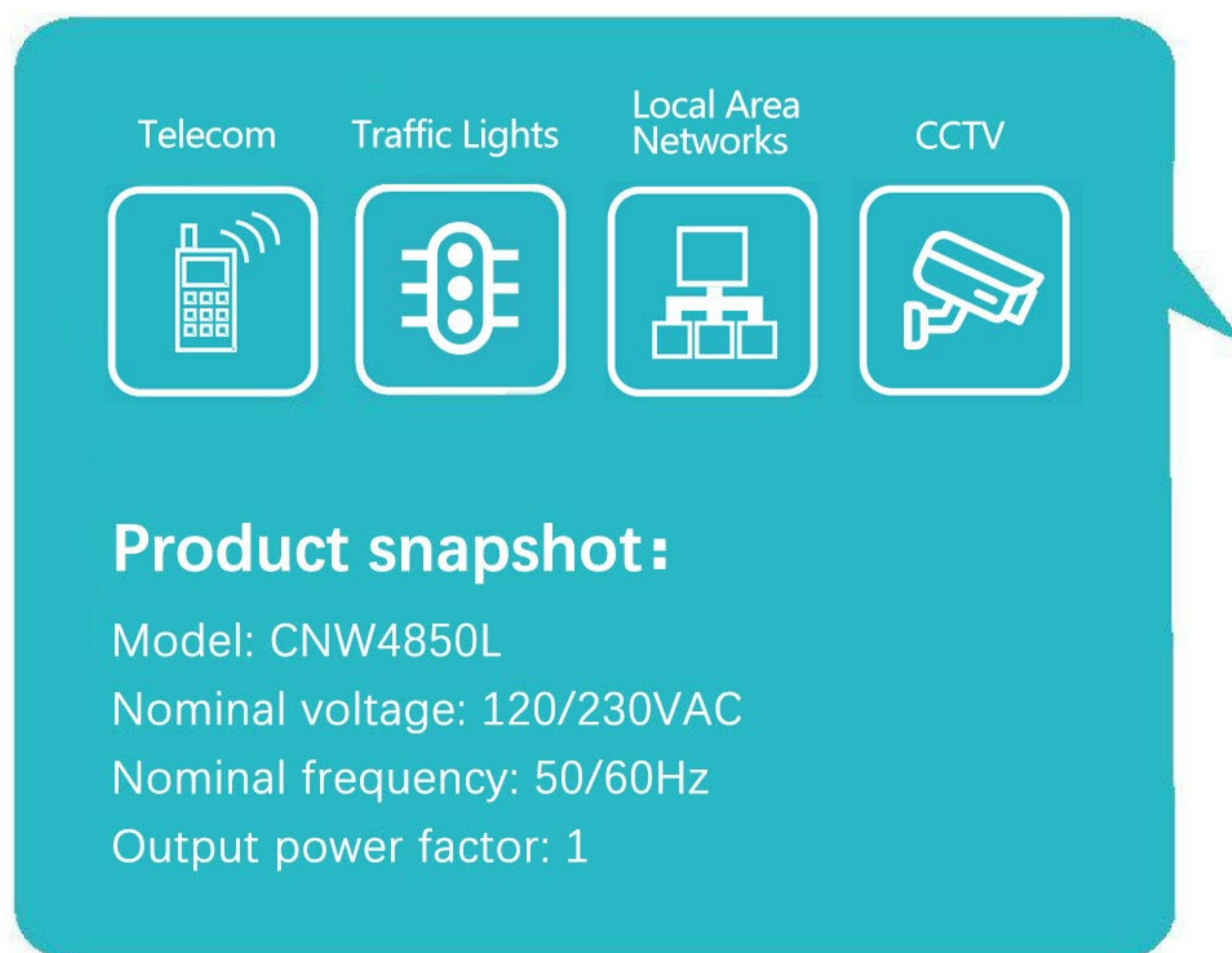
CNW4850L Series

GREEN
ENERGY SAVING
ENVIRONMENTAL
PROTECTION



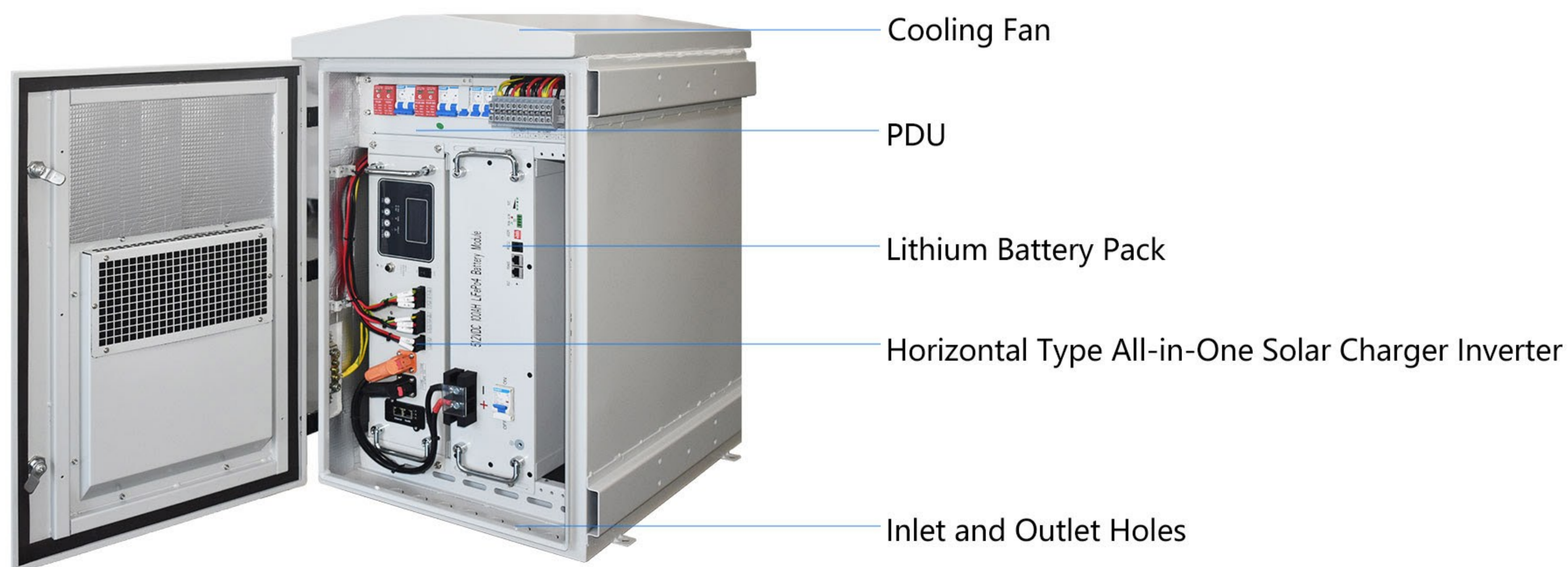
Integrated Outdoor Solar Power System

CNW4850L Series



Telecom Traffic Lights Local Area Networks CCTV

Product snapshot:
Model: CNW4850L
Nominal voltage: 120/230VAC
Nominal frequency: 50/60Hz
Output power factor: 1



Characterization

- The whole system integration includes off-grid solar inverter module, lithium iron phosphate battery pack, PDU, and outdoor cabinet.
- The system is commonly used in corners of the city, remote roads, mountains, bad environments such as dust, moisture, rain, mist-erosion, and areas with very poor power quality.
- The system provides continuous pure sine wave AC power supply for outside communications/network equipment.

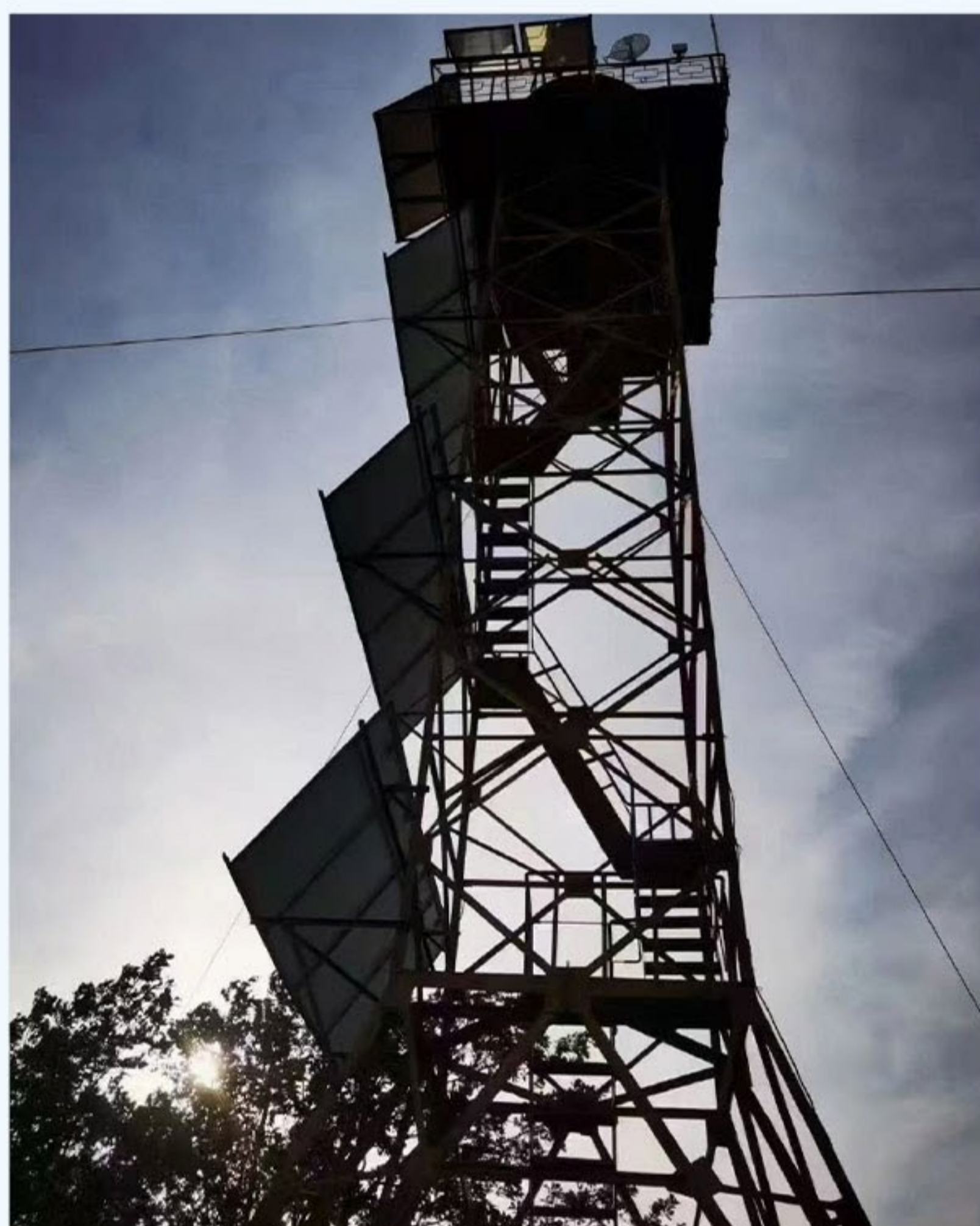
Environmental Adaptability

- Wide input voltage range, avoiding frequent switching to battery power supply due to excessive power grid voltage, reducing battery failure probability, to adapt to the power environment in poor areas.
- For the environment which requires higher IP level, we use heat exchanger to effectively reduce the temperature inside the cabinet and improve IP protection level.

CNW4850L SERIES

Key Feature

- It adopts full-digital double closed-loop control combined with advanced SPWM technology to output pure sine waves.
- Two output modes: mains electricity bypass and inverter output, to offer uninterrupted power supply.
- Four charging modes: PV Only, Mains Electricity Priority, PV Priority, and PV&Mains Electricity Hybrid Charging.
- Advanced MPPT technology with 99.9% efficiency.
- Equipped with a LCD display and 3 LED indicators that can clearly indicate the status and data.
- Power saving mode, reducing no-load loss.



- Intelligent variable speed fan to efficiently dissipate heat and extend system lifespan.
- It has two lithium battery activation modes: mains and PV, and supports lithium battery access.
- All-round protection for solar panels including overload and short circuit protection, under-voltage and over-voltage protection, and reverse polarity protection.
- With sun protection, heat insulation, and roof ventilation.
- With waterproof and filtration dust inlets.
- The cabinet body is designed at the IP55 protection level. The front door of the cabinet is designed with waterproof shutters, and the back is welded to the outdoor cabinet.
- Modular design makes it easy to maintain.
- System is equipped with AC and DC lightning protection.

Remark

- Long-term storage of the battery requires a dry, clean, dark, and well-ventilated indoor environment. The suitable storage temperature range is $-20 \sim 35^{\circ}\text{C}$.
 - Batteries must be stored and transported at close to 50% SoC.
 - For long-term storage, the electricity needs to be cycled every 6 months.
- When loading and unloading the battery during transportation, please be careful
- not to drop it, do not stack over 4 layers, or place upside down, and ensure that the front is facing up.



TECHNICAL SPECIFICATIONS

Model	CNW4850L-3KW	CNW4850L-3KWL	CNW4850L-5KW
Inverter			
Output voltage waveform	Pure sine wave		
Rated output power	3000W	3000W	5000W
Rated output voltage	230Vac	120Vac	230Vac
Power factor	1		
Output frequency range	50Hz / 60Hz (Automatic adaptation)		
Rated battery input voltage	48V		
Communication interface	USB/RS232/RS485/Dry Contact WiFi (Optional)		
Surge power	7000VA	7000VA	11000VA
Peak efficiency	>93.6%		
Switch time	10ms		
Grid voltage regulation (battery mode)	±5%		
AC Charge			
Maximum AC charge current	80A		
DC Charge			
PV maximum open circuit voltage	500VDC		
PV maximum power	5000W	5000W	6000W
MPPT operating voltage range	120VDC-450VDC		
Maximum PV charge current	100A		
Battery			
Battery type	LiFePO4		
Rated capacity	50Ah		
Nominal voltage	48VDC / 51.2V		
Cycle life	3500 cycles ≥80%, 25±2°C, 1C/1C, 80% DOD		
Environment			
Humidity	5% to 95% Relative humidity (non-condensing)		
Altitude	Less the 2000m		
Operating temperature range	-10°C to 50°C		
Storage temperature range	-15°C ~ 60°C		

STANDARD: Conform to GB/IEC regulation: EMC: GB7260.2/IEC62040-2 -GB/17626.2 ~ 5/IEC61000-4-2 ~ 5 SAFETY:GB4943

Note: Product specifications are subject to change without further notice.

