

# H100

SOLAR PUMP DRIVE  
3-ph/400Vac - 0.8kW ~ 500kW



**HmT**

**LS** ELECTRIC

# Features



## Highlights

- Available in a wide capacity range from 0.75kW to 500kW
- Flexible supply select with change over switch - solar and grid
- Compatible with all pump types (submersible and surface mount pumps)
- Various protection features and diagnostics
- Fast and easy installation and commissioning

### Integrated MPPT (Maximum Power Point Tracking)

The MPPT algorithm enables you to extract the best power from your solar panel under all conditions. It tracks the maximum output power available from the solar panel during the day and automatically adjusts them for the most optimal utilization of solar energy.

### Answer for optimal off-grid solution

From the irrigation of fields to remote villages and isolated places, the solar pump system can be well suited to satisfy the water pumping demand. It is a perfect and flexible option for power source.

### Advanced time control

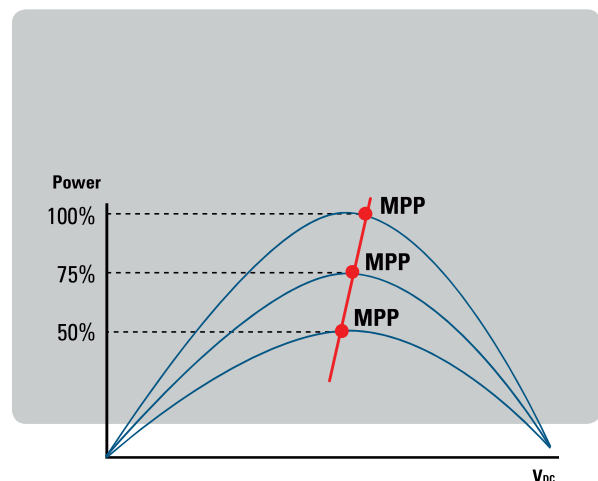
Scheduling (time event: real time clock) functionality makes it possible for the solar drive system to start and stop automatically based on the radiation condition of the sun.

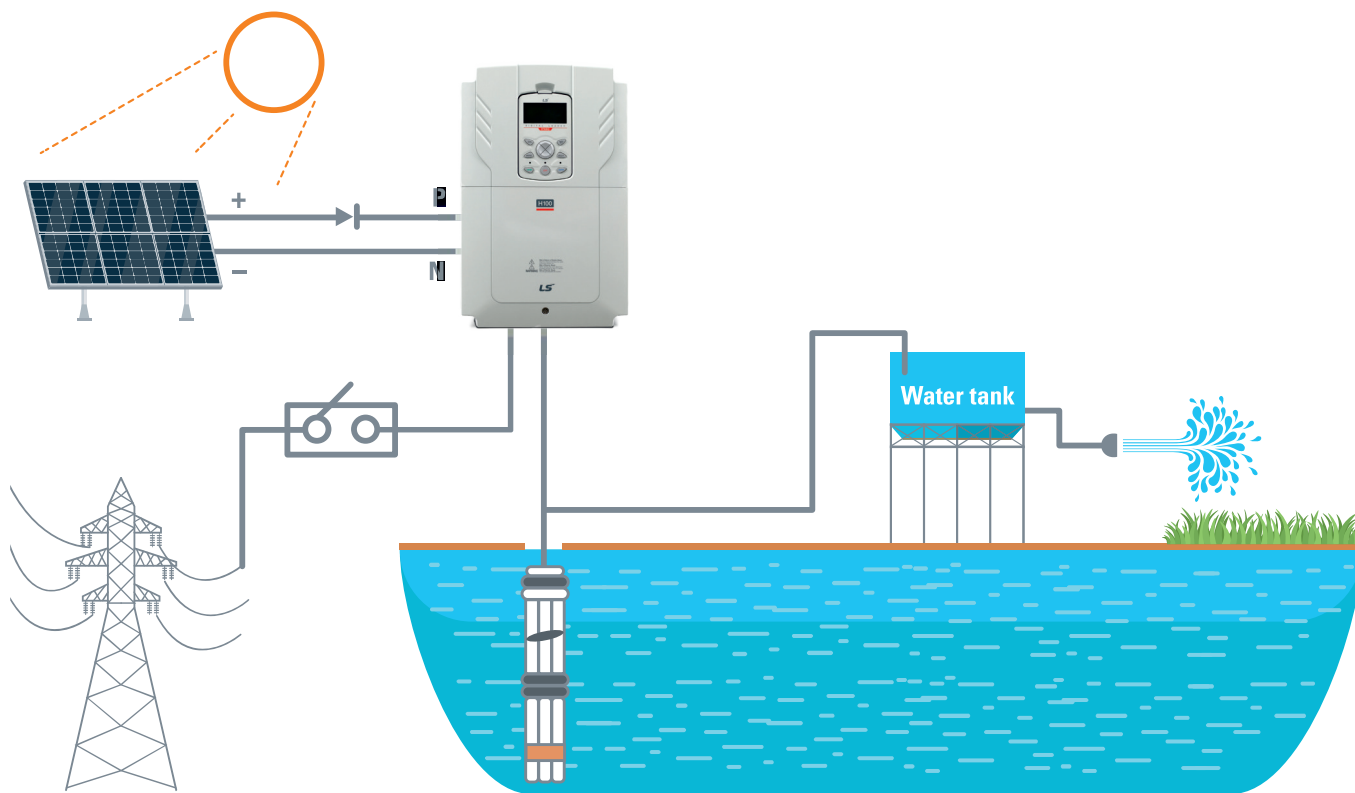
### All-round protection

Protection specified for pumps, such as: dry run; pipe broken and pump overload prevents any possible pump damages - ensuring the system runs safely. Proven reliability based on the H100 protection functionality.

### Low carbon emission

The adoption of solar drive systems reduces the demand for fossil fuels, limits greenhouse gas emissions, and shrinks your carbon footprint.





## Let your drive turn sunlight into pumping water



### Cost Savings

It immediately reduces or even eliminates the cost of the electrical grid - protecting your business against future power price rises.



### Low Maintenance

Automatic control depending on solar energy availability enables unmanned control and requires little to no maintenance.



### Eco Friendly

This renewable energy does not produce air pollutants without emitting Co2.

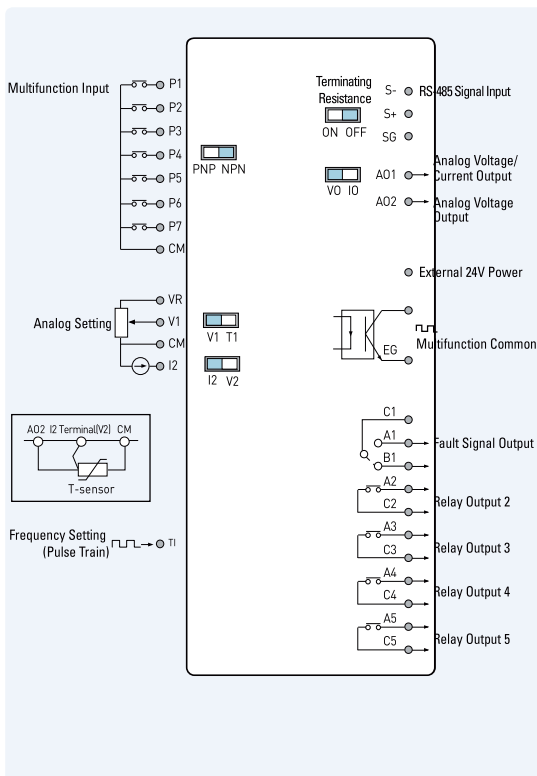
# Specifications



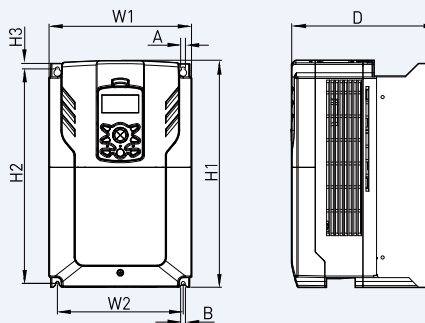
## Solar drive specifications

PV input	
Maximum input DC voltage	800VDC
Recommended Voc range	500~700VDC
Recommended MPPT voltage range	450~600VDC
Grid or Backup generator input	
Input voltage	Three phase 380~480VAC (-15%~+10%)
Output specification	
Rated output voltage	Three phase 380~480VAC
Output frequency	0~400.00Hz (Default 60.00Hz)
Protection	
Built-in protection	Motor overload & drive overload(IOLT), Ground fault, Short circuit (CO <sub>2</sub> ), Over current, Drive over heat, Under voltage & over voltage, Single phasing dry run(Under load)
Installation consideration	
Site conditions	No direct sunshine, No dust, corrosive gas, combustible gas, oil mist, steam, dripping or salinity etc.
Altitude	Lower than 3,280ft (1,000m) above sea level
Humidity	90% relative humidity (No condensation)
Vibration	Less than 0.6G (5.9m/sec <sup>2</sup> )
Storage temperature	-4~149°F (-20~65°C)
Ambient temperature	-10°C~50°C (40°C and above, 2.5%/°C current derating search, 50°C 75% of the rated current of the drive if possible)
Air pressure	70~106kPa
Efficiency	Rated power run≥93%
Installation	Wall or rail mounting
Protection grade	IP20
Cooling	Forced air cooling
Communication	LS 485, Modbus RTU, BACnet, Metasys-N2

## Connection diagram



## Dimension



Product Capacity	W1	W2	H1	H2	H3	D	A	B
200V 0.75~11kW	160(6.30)	137(5.39)	232(9.13)	216.5(8.52)	10.5(0.41)	181(7.13)	5(0.20)	5(0.20)
200V 15kW	180(7.09)	157(6.18)	290(44.42)	273.7(10.78)	11.3(0.45)	205.3(8.08)	5(0.20)	5(0.20)
200V 18.5kW	220(8.66)	193.8(7.63)	350(13.78)	331(13.03)	13(0.51)	223.2(8.79)	6(0.24)	6(0.24)
400V 0.75~11kW	160(6.30)	137(5.39)	232(9.13)	216.5(8.52)	10.5(0.41)	181(7.13)	5(0.20)	5(0.20)
400V 15~18.5kW	180(7.09)	157(6.18)	290(44.42)	273.7(10.78)	11.3(0.45)	205.3(8.08)	5(0.20)	5(0.20)
400V 22~30kW	220(8.66)	193.8(7.63)	350(13.78)	331(13.03)	13(0.51)	223.2(8.79)	6(0.24)	6(0.24)
400V 37kW	275(10.83)	232(9.13)	450(17.72)	428.5(16.87)	14(0.55)	284(11.18)	7(0.28)	7(0.28)
400V 45~55kW	325(12.08)	282(11.10)	510(20.08)	486.5(19.15)	16(0.63)	284(11.18)	7(0.28)	7(0.28)
400V 75~90kW	325(12.08)	275(10.83)	550(21.65)	524.5(20.65)	16(0.63)	309(12.80)	9(0.35)	9(0.35)
400V 110~185kW	300(11.81)	200(7.87)	706(27.80)	688.5(27.11)	9.5(0.37)	386(15.20)	9(0.35)	9(0.35)
400V 220~500kW	426(16.77)	320(12.60)	922.3(36.31)	895.5(35.26)	15.5(0.61)	440(17.32)	11(0.43)	11(0.43)

