



# Boost Module For GD100-PV

GD100-PV solar pumping inverters equal to or less than 2.2kW, support optional boost module to improve the utilization of the solar module.

## 1. Features

- **Ease of use**

It can automatically identify the inverter type so as to set the bus voltage based on the type, increases the voltage to 350V for 220V inverters and 570V for 380V inverters.

- **Auto switch between the grid and PV input**

The function can be implemented by connecting both grid and PV input after setting P15.32 to 0 (auto switch). When the PV voltage is lower than P15.33, the input power is switched to the grid. When the PV voltage is bigger than P15.34, the power is switched back to PV input.

- **Cost reducing**

It can reduce the cost by decreasing the number of solar panels. The table below shows the number of solar panels between the system with or without boost module (250W solar panel for example).

Pump	Number of solar panels		
	With boost module	Without boost module	Reduced
220V 0.4kW	4*1 /250W	11*1 /250W	7
220V 0.75kW	5*1 /250W	11*1 /250W	6
220V 1.5kW	8*1 /250W	11*1 /250W	3
380V 0.75kW	5*1 /250W	18*1 /250W	13
380V 1.5kW	8*1 /250W	18*1 /250W	10
380V 2.2kW	13*1 /250W	18*1 /250W	5

## 2. Specifications

### Boost module specifications

Model	PP100-3R2-PV
<b>Input</b>	
Max. input power (W)	3200
Max. DC voltage (V)	600
Starting voltage (V)	80
Min. working voltage (V)	70
Max. input current (A)	12
<b>Output</b>	
Output voltage (V)	350V for 220V inverters and 570V for 380V inverters

## 3. Usage

1. Connect PV+ and PV- of the boost module to the positive input terminal and negative input terminal of the solar modules respectively.
2. Connect the output terminals (+) and (-) of the boost module to the input terminals (+) and (-) of the pumping inverter.
3. Connect RS-422communication receiving terminal RX of the boost module to RS-422communication sending terminal TX of the pumping inverter. Connect RS-422communication sending terminal TX of the boost module to RS-422communication receiving terminal RX of the pumping inverter. Use twisted pairs for wiring.
4. If the wiring is connected, switch on the breaker Q1 at the DC side for automotive running.

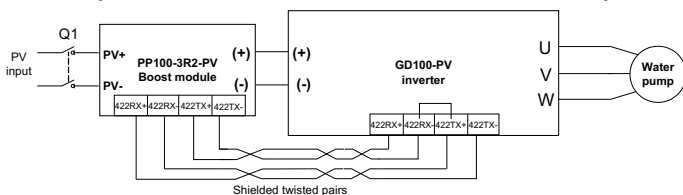


Figure 1 Connection between the boost module and inverter

### LED status description

LED status	Description
Green LED blinking	The boost module has been powered on, and the control circuit is working.
Green LED on	The boost module is running.
Red LED on	The boost module is faulty.

## 4. Installation dimensions

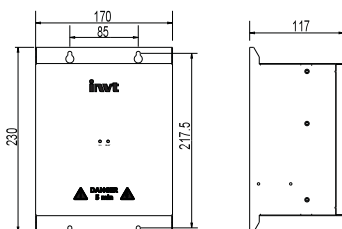


Figure 2 Installation dimensions of the boost module



Part number: 66001-00456

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