

# SPC Series Solar pump Controller





SPC is INVT's new generation solar pump controller. It integrates high protection, exquisite structure and simple operation into one, which not only perfectly realizes the control function, but also has perfect customization scheme to meet the requirements of different applications.



## Features



Only PV input



Support SKD modular design



Support OEM/customization



Optional DC switch



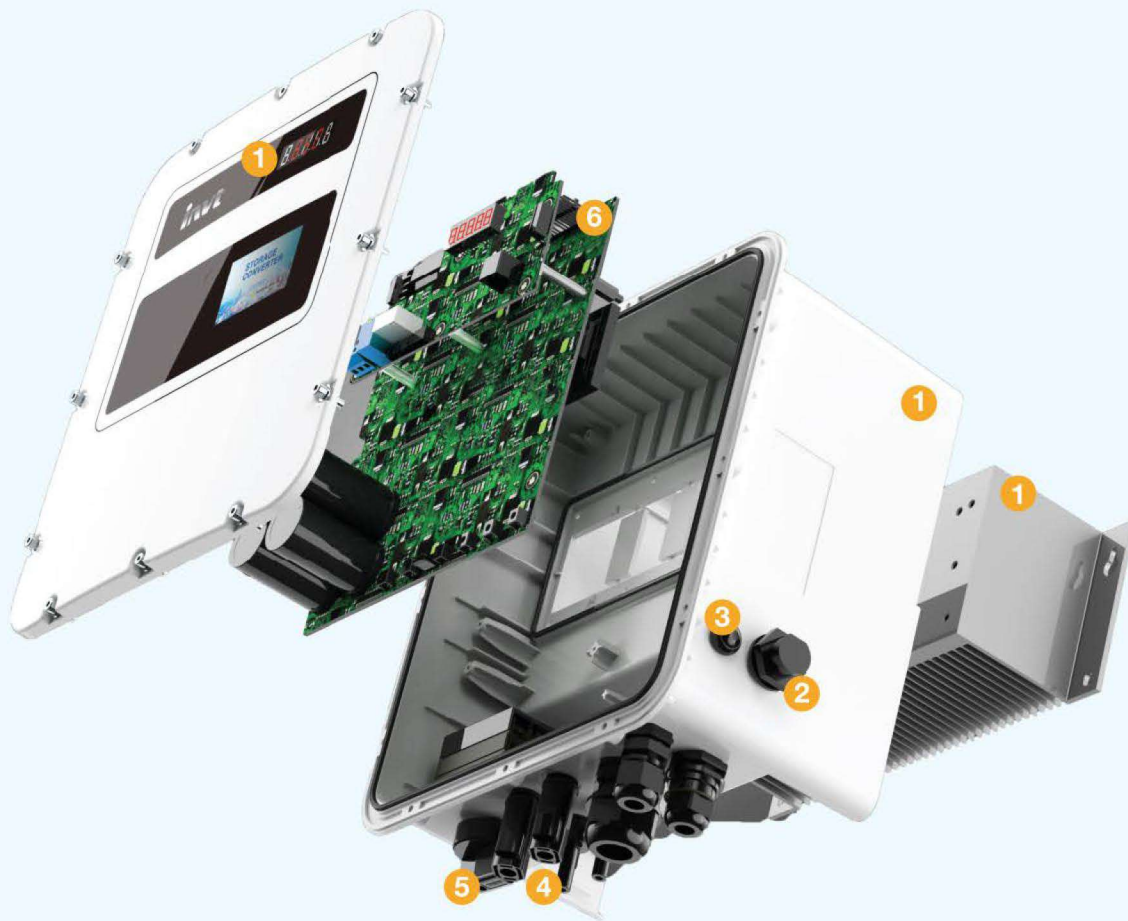
Compact appearance



IP65 protection level



GPRS module



## / Modular Simplicity

### 1.Enclosure

Plastic enclosure with IP65 design, more economical. Fan less cooling design to meet the cooling requirements. Simple LED display.

### 2.GPRS connector

Support built-in GPRS module solution. Optional for -H model.

### 3.ON/OFF switch

Built-in for standard model. Easier to use.

### 4.MC4 terminal

Built-in combiner box function, more economical.

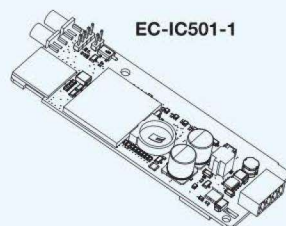
### 5.DC switch

Optional DC switch of PV input side for -H model.

### 6.Drive board and control board

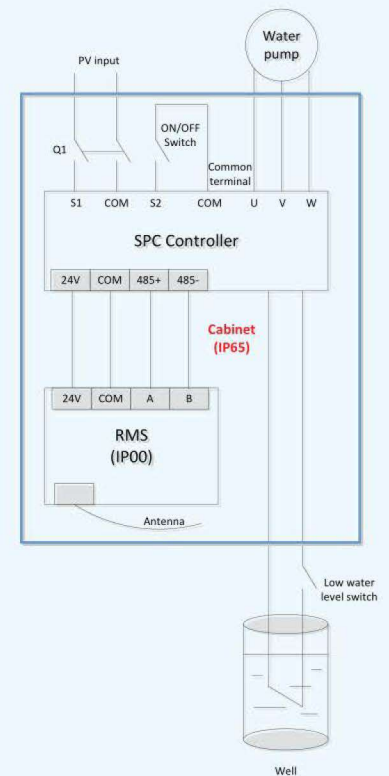
Modular design, easier maintenance. Support IP00 SKD solution.

### RMS module (IP00)



- ① Works at -25 C ~60 C
- ② Support 1RS485, 1TTL, 2SMA (GSM,GPS), 1 spring card holder, 1 spring Micro SD
- ③ Support Modbus, IoT communication, PPP, FTP and embedded TCP/UDP protocol

### System connection



## / Type Selection

### SPC 2K2 TR 4 6 - H

① ② ③ ④ ⑤ ⑥

No.	Sign	Detail description	Detail content
①	SPC	Product abbreviation	Name of the solar pumping controller
②	2K2	AC output power	Rated AC output power 2K2: 2.2kW
③	TR	Technical type	TR: 3PH
④	0	Output voltage	2: 3PH 220V 4: 3PH 380V
⑤	0	Protection level	0: IP00 6: IP65
⑥	H	Configuration instruction	For IP65 machine: H: High configuration S: Standard configuration

## / Product Specification

DC input			
Output power	2.2kW	4kW	7.5kW
Model	SPC2K2TR26-S/H	SPC004TR46-S/H	SPC7K5TR46-S/H
Max. DC voltage (V)	450	800	800
Start voltage (V)	120	250	250
Min. working voltage (V)	70	200	200
Recommended MPPT voltage (V)	200-400	300-750	300-750
Recommended input working voltage (V)	330	580	580
AC input			
Output voltage (V)	0-230	0-400	0-400
Output frequency (Hz)	0-400	0-400	0-400
Control performance			
Control method	V/F(SVPWM), SVC		
Motor type	Asynchronous and synchronous		
Overload capability	120% of rated current: 1 minute 150% of rated current: 10 seconds		
Carrier frequency	2kHz		
Reset function	Support fault (except for IGBT over-current) reset. Reset times and interval time can be set in function code P08.28 and P08.29.		
Others			
Protective degree	IP65		
Cooling method	Natural cooling (Internal air cooling)		
Interface	External LED keypad (LCD keypad is not supported)		
Ambient temperature	-25 C ~60 C , if above 45 C , de-rated 1% for every additional 1 C .		
Altitude	Below 3000m; if above 2000m, de-rated 1% for every additional 100m.		

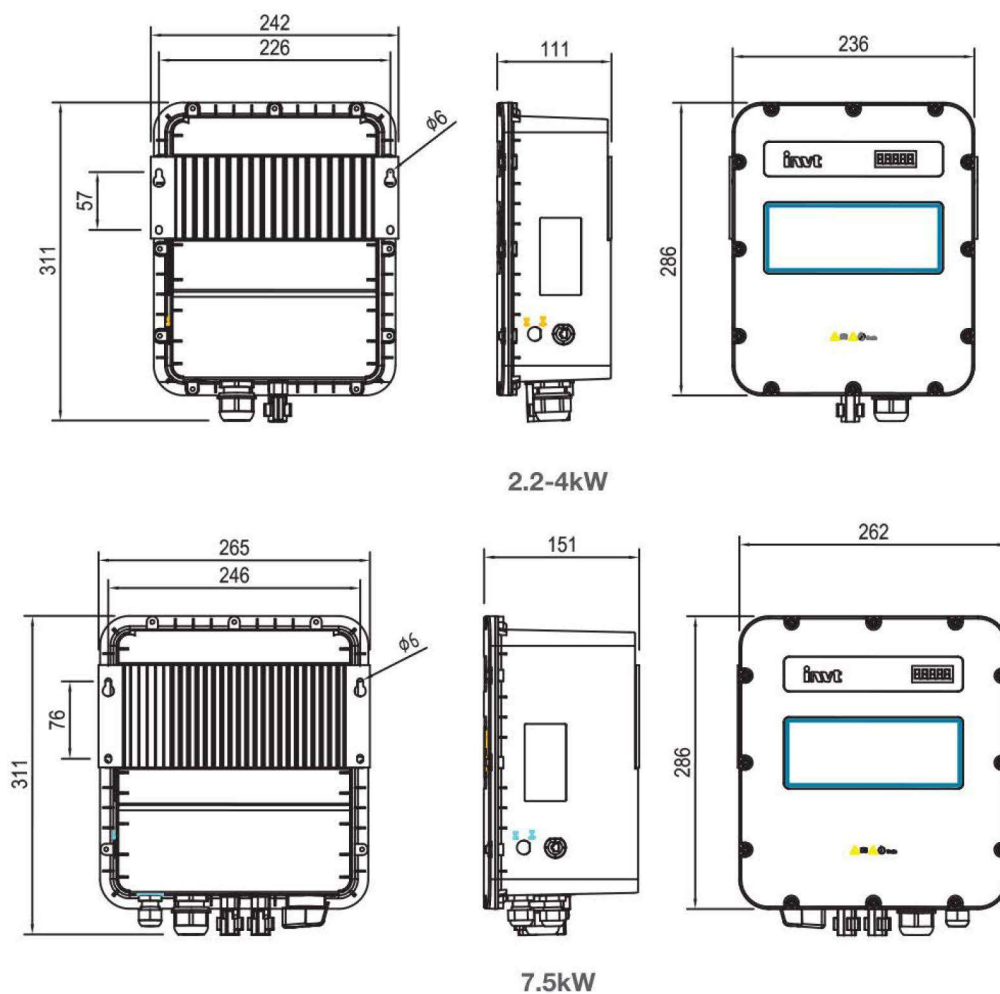
## Power Ratings

Model	Output power		Rated input current(A)	Rated output current (A)	Carton dimensions W*H*D (mm)	Weight			
	(kW)	(HP)				Net		Gross	
						kg	lbs	kg	lbs
3PH 220V									
SPC2K2TR20	2.2	3	9	10	None	0.5	1.1	None	
SPC2K2TR26-S	2.2	3	9	10	302*380*190	2.5	5.5	3	6.6
SPC2K2TR26-H	2.2	3	9	10		2.5	5.5	3	6.6
3PH 380V									
SPC004TR40	4.0	5	9	9.5	None	0.6	1.3	None	
SPC7K5TR40	7.5	10	18	18.5	None	0.8	1.8	None	
SPC004TR46-S	4.0	5	9	9.5	302*380*190	2.5	5.5	3	6.6
SPC004TR46-H	4.0	5	9	9.5		2.5	5.5	3	6.6
SPC7K5TR46-S	7.5	10	18	18.5	340*400*260	3.6	7.9	4.4	9.7
SPC7K5TR46-H	7.5	10	18	18.5		3.6	7.9	4.4	9.7

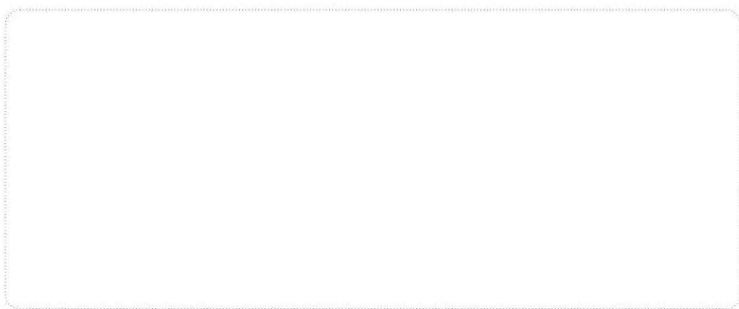
Note: IP00 products are packed in integrated package. The specific size and gross weight are confirmed according to the order requirement.

## Product Dimension

### IP65 complete device



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|-------------------------------|--|---------------------------------------|----------------------------|-----------------------------------|
| <b>Industrial Automation:</b> | • Frequency AC Drive                         | • Servo & Motion Control              | • Motor & Electric Spindle | • PLC                             |
|                               | • HMI  | • Intelligent Elevator Control System | • Traction Drive           |                                   |
| <b>Electric Power:</b>        | • SVG  | • Solar Pump Controller               | • UPS                      | • Online Energy Management System |
|                               | • New Energy Vehicle Electric Control System |                                       |                            |                                   |

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