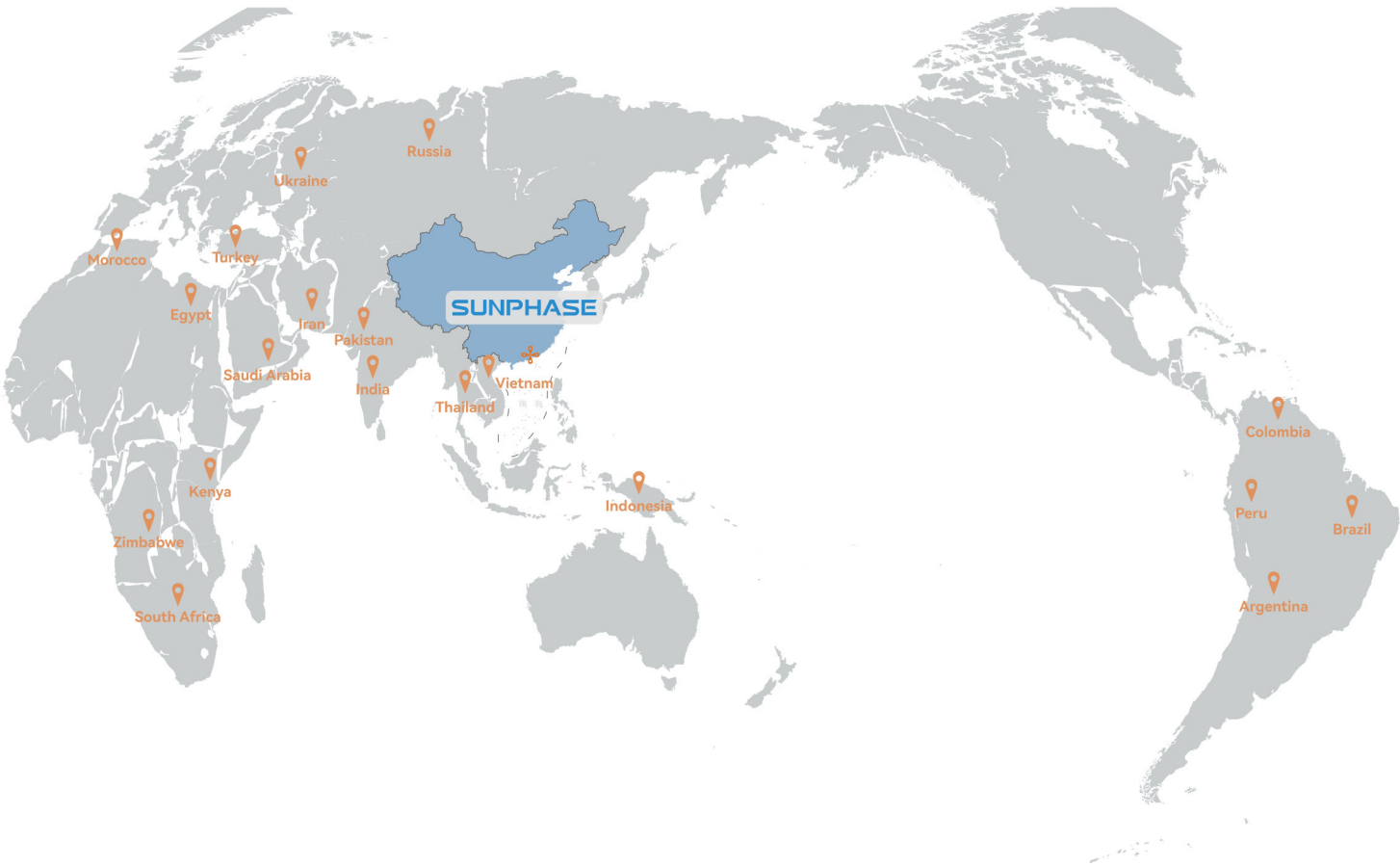




Shenzhen Sunphase Electric Co., Ltd.

- 2nd Floor, Block B, Guangming Bangkai High-tech Park, Guangming District, Shenzhen
- www.sunphase.com.cn
- benson@sunphase.com.cn
- +86 198-7987-2957

Variable Frequency Drive
General Purpose Drive
Dedicated Drive

Solar Pump Inverter
IP20 Solar Pump Inverter
IP65 Solar Pump Inverter

Solar Inverter
Off Grid Solar Inverter
Hybrid Solar Inverter



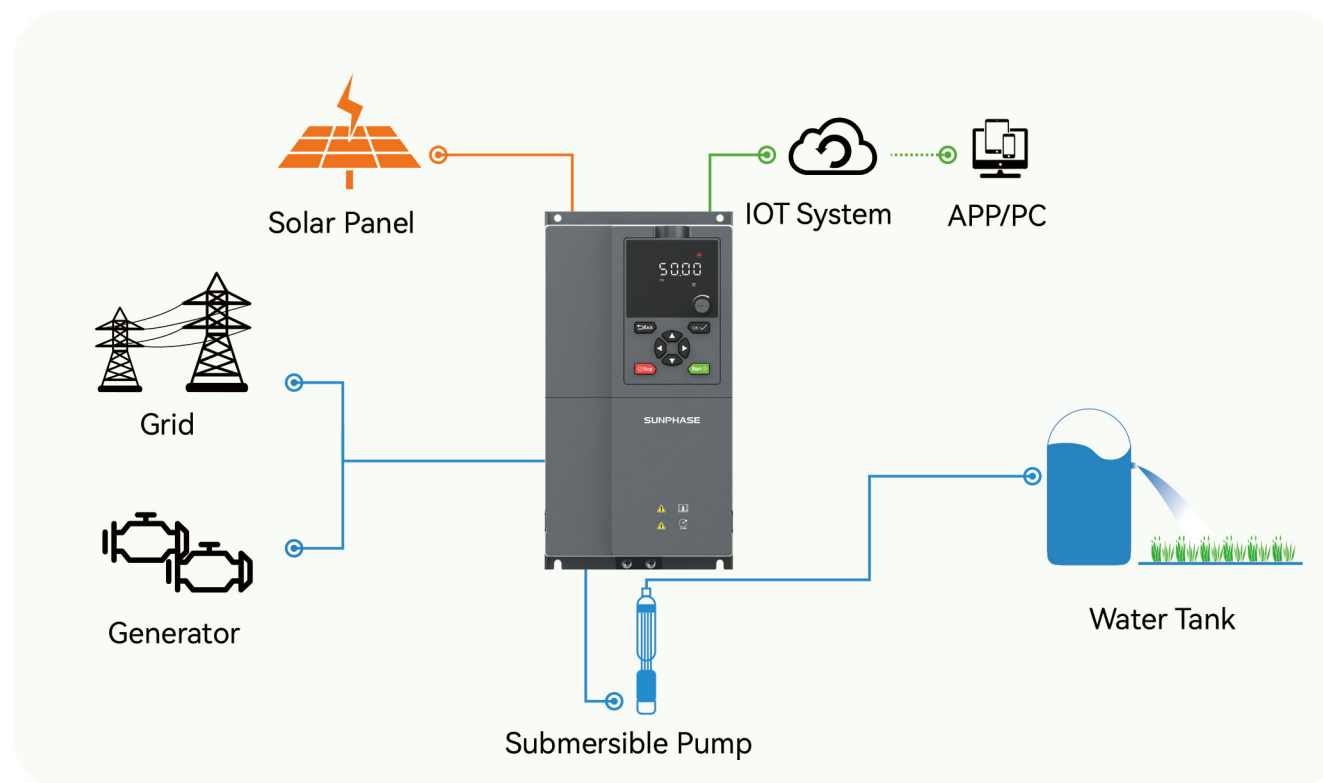
S10&S200 Series
Solar Pump Inverter

Product Introduction

S10&S200 series solar pump inverter receive DC power from solar panel and output AC power for pumping control. It is widely used in applications such as agricultural irrigation, desert management, water supply in areas with unstable power sources and etc.



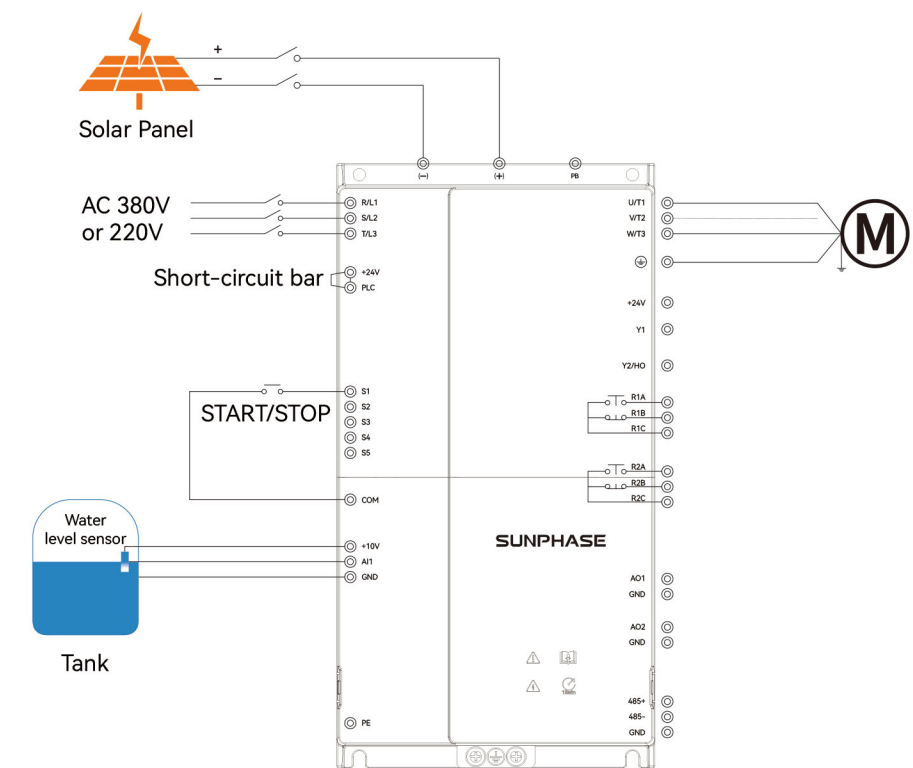
System Diagram



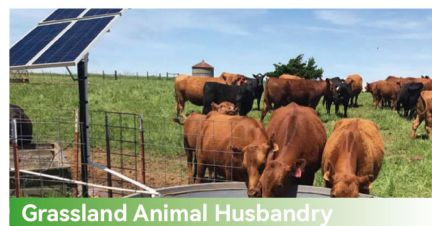
Product Feature

- ◆ **Advanced MPPT control**
MPPT efficiency up to 99%
- ◆ **900VDC input design**
Customized models support 900VDC input
- ◆ **Adapt with multiple types of pumps**
Support AM, PMSM and single phase motor
- ◆ **Hybrid operation**
AC and DC power supply at same time for full frequency output
- ◆ **Auto Switch Function**
Support AC & DC supply switch automatically at setting voltage
- ◆ **Auto dormancy & wake up**
Support dormancy and wake up function automatically
- ◆ **Multiple pump protections**
Pump dry run protection
Low frequency protection
Water full protection
Lighting & Surge protection
Over current protection
Over heat protection
Short circuit protection
- ◆ **Comply with CE certificate**
Complaint with standards EN IEC 61800/62109/61000

Wiring Diagram



Application



Model Description

S200 - 4R0G - 4 B (900V)
① ② ③ ④ ⑤

No.	Sign	Description	Remarks
①	S200	Product Series	S200 series
②	4R0G	Power Rating	4R0: 4 kW G: Constant torque load
③	4	Voltage Grade	2: 3PH 220V input S2: 1PH 220V input 4: 3PH 380V input S1: 1PH 220V input and output
④	B	Brake Unit	B: Built-in brake unit
⑤	(900V)	DC Input Voltage	NULL: 800VDC input (900V): 900VDC input

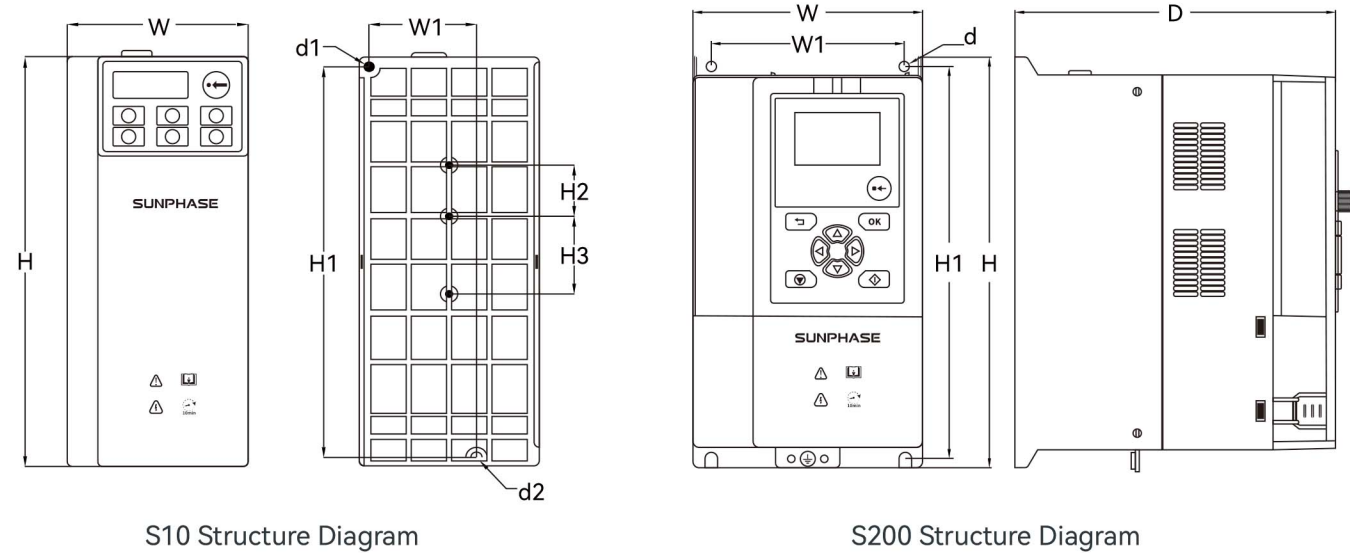
Product Specification

Model	-S1	-S2	-2	-4
AC Input Voltage	1PH 220V		3PH 220V	3PH 380V
Max. DC Input Voltage (V)	450		800	900
Min. Operating Voltage (V)	140		230	230
Recommended Voc Range (V)	360-430		550-750	550-850
Output Voltage	3PH 380-480V 50/60Hz			
Output Frequency	0-599HZ			
Control Mode	V/F control, SVC			
MPPT Efficiency	99%			
Overload Capability	150% Rated current 60s 180% rated current 10s 200% rated current 1s			
Common Protection	Over current, over voltage, over load, over heat, phase loss, short circuit and etc			
Dedicated Protection	Pump dry run, pump over current, low frequency, water full, lighting & surge protection			
Altitude	0-2000m (Above 1000m, derating to use)			
Environment Temperature	-10°C-50°C (Above 40°C, derating to use)			
Installation	Wall or rail mounting			
Protection Grade	IP20			
Cooling	Forced air cooling			
Certification	CE			

Model Selection

Model	Rated Output Power		Maximum DC Input Current (A)	Rated Output Current (A)
	kW	HP		
S10-0R7G-S1B	0.75	1	15	7.5
S10-1R5G-S1B	1.5	2	15	10.5
S10-2R2G-S1B	2.2	3	30	17
S10-0R7G-S2B	0.75	1	15	4.2
S10-1R5G-S2B	1.5	2	15	7.5
S10-2R2G-S2B	2.2	3	15	9.5
S10-0R7G-4B	0.75	1	15	2.5
S10-1R5G-4B	1.5	2	15	4.2
S10-2R2G-4B	2.2	3	15	5.5
S10-4R0G-4B	4	5	15	9.5
S200-4R0G-4B(900V)	4.0	5	15	9.5
S200-5R5G-4B(900V)	5.5	5	30	13
S200-7R5G-4B(900V)	7.5	8	30	17
S200-011G-4B(900V)	11	15	30	25
S200-015G-4B(900V)	15	20	42	32
S200-018G-4B(900V)	18.5	25	53	37
S200-022G-4B(900V)	22	30	63	45
S200-030G-4B(900V)	30	40	95	60
S200-037G-4B(900V)	37	50	116	75
S200-045G-4(900V)	45	60	137	91
S200-055G-4(900V)	55	70	169	112
S200-075G-4(900V)	75	100	232	150
S200-090G-4(900V)	90	125	275	176
S200-110G-4(900V)	110	150	338	210
S200-132G-4(900V)	132	175	401	253
S200-160G-4(900V)	160	210	486	304
S200-185G-4(900V)	185	250	560	350
S200-200G-4(900V)	200	260	613	377
S200-220G-4(900V)	220	300	676	426
S200-250G-4(900V)	250	350	760	470
S200-280G-4(900V)	280	400	855	520
S200-315G-4(900V)	315	410	961	600
S200-355G-4(900V)	355	500	1088	650
S200-400G-4(900V)	400	520	1225	725
S200-450G-4(900V)	450	600	1373	800
S200-500G-4(900V)	500	650	1531	860
S200-560G-4(900V)	560	750	1707	990

Product Structure



Reactor & Sine Wave Filter

When the distance between the inverter and motor is longer than 50m or 200m, we suggest to add an output reactor or sine wave filter



Output Reactor



Sine Wave Filter

Product Dimension

Model	Power Rating (kW)	Appearance and Installation Dimension(mm)					
		W	W1	H	H1	D	Hole Diameter(d)
S10 Series	0.4-4.0	82	-	200	-	150	-
S200 Series	0.75-2.2	125	105	220	210	175	4.5
	4-5.5	125	105	220	210	175	4.5
	7.5-11	140	122	280	260	185	5.5
	15-22	180	155	340	336	195	5.5
	30-37	250	200	432	425	227	7
	45-55	310	205	545	466	260	7
	75	338	205	580	601	310	11.5
	90-110	338	205	580	620	310	11.5
	132-160	400	300	750	724	320	11.5
	185-280	540	340	925	896	380	12
	315-400	700	500	1026	989	390	14
	450-560	940	700	1684	-	440	30

Model	Power Rating (kW)	Output Reactor	Sine Wave Filter
S200-4R0G-4B(900V)	4.0	OCR-3.7K-0.4SC	SFR-0010-6M00-0.4SC
S200-5R5G-4B(900V)	5.5	OCR-5.5K-0.4SC	SFR-0015-4M00-0.4SA
S200-7R5G-4B(900V)	7.5	OCR-7.5K-0.4SC	SFR-0020-3M00-0.4SA
S200-011G-4B(900V)	11	OCR-11K-0.4SAL	SFR-0030-2M00-0.4SA
S200-015G-4B(900V)	15	OCR-15K-0.4SAL	SFR-0040-1M50-0.4SA
S200-018G-4B(900V)	18.5	OCR-18.5K-0.4SAL	SFR-0050-1M20-0.4SA
S200-022G-4B(900V)	22	OCR-22K-0.4SAL	SFR-0060-1M10-0.4SA
S200-030G-4B(900V)	30	OCR-30K-0.4SAL	SFR-0080-0M85-0.4SA
S200-037G-4B(900V)	37	OCR-37K-0.4SAL	SFR-0090-0M80-0.4SA
S200-045G-4(900V)	45	OCR-45K-0.4SAL	SFR-0120-0M52-0.4SA
S200-055G-4(900V)	55	OCR-55K-0.4SAL	SFR-0150-0M45-0.4SA
S200-075G-4(900V)	75	OCR-75K-0.4SAL	SFR-0200-0M30-0.4SA
S200-090G-4(900V)	90	OCR-110K-0.4SA	SFR-0250-0M28-0.4SA
S200-110G-4(900V)	110	OCR-110K-0.4SA	SFR-0250-0M28-0.4SA
S200-132G-4(900V)	132	OCR-132K-0.4SA	SFR-0290-0M23-0.4SA
S200-160G-4(900V)	160	OCR-160K-0.4SA	SFR-0330-0M20-0.4SA
S200-185G-4(900V)	185	OCR-185K-0.4SA	SFR-0390-0M17-0.4SA
S200-200G-4(900V)	200	OCR-220K-0.4SA	SFR-0490-0M14-0.4SA
S200-220G-4(900V)	220	OCR-220K-0.4SA	SFR-0490-0M14-0.4SA
S200-250G-4(900V)	250	OCR-250K-0.4SA	SFR-0600-0M12-0.4SA
S200-280G-4(900V)	280	OCR-280K-0.4SA	SFR-0600-0M12-0.4SA
S200-315G-4(900V)	315	OCR-315K-0.4SA	SFR-0660-0M10-0.4SA
S200-355G-4(900V)	355	OCR-355K-0.4SA	SFR-0800-087U-0.4SA
S200-400G-4(900V)	400	OCR-380K-0.4SA	SFR-0800-087U-0.4SA
S200-450G-4(900V)	450	OCR-380K-0.4SA	SFR-1000-070U-0.4SA
S200-500G-4(900V)	500	OCR-450K-0.4SA	SFR-1000-070U-0.4SA
S200-560G-4(900V)	560	OCR-550K-0.4SA	SFR-1000-070U-0.4SA