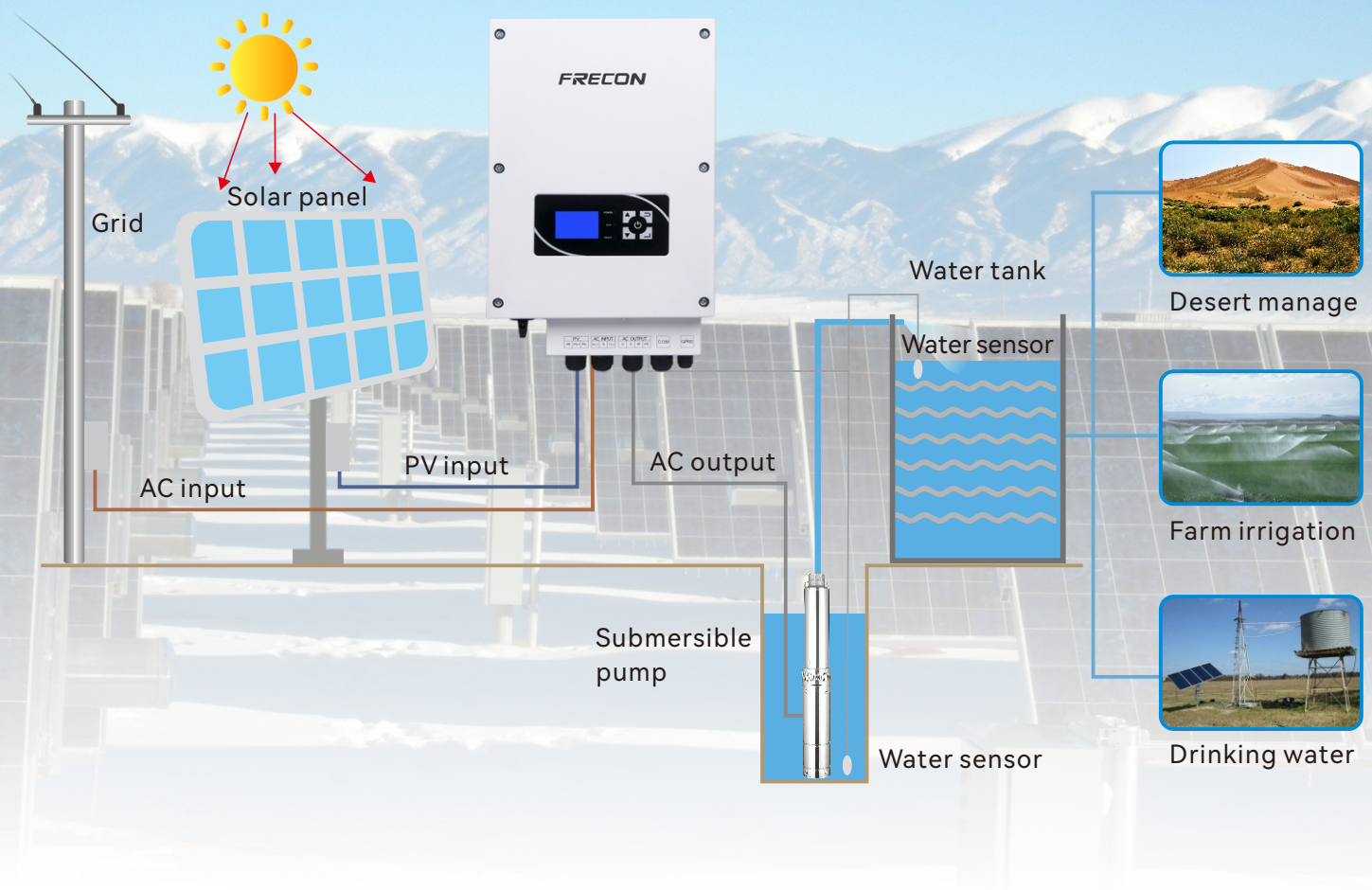


# PV580 Series

Solar Pump Inverter



**FRECON**



## Features

- Natural cooling, low noise (Up to 7.5KW)
- IP65 design, outdoor installation
- Compatible with DC/ AC power input
- Excellent performance, large water yield
- Operating temperature range:  $-25\sim 60^{\circ}\text{C}$
- Optimized MPPT algorithm, efficiency  $> 99\%$
- Widely used in various AC asynchronous and synchronous pumps
- All models can be configured with 4G or WIFI module (Optional) for real-time remote monitoring and operation in mobile APP
- Solve the problems of agricultural irrigation, daily water use, and desert control in areas without electricity and water shortage
- Supports over-current, over-voltage, output phase loss protection, short circuit, over-heating, etc. protection
- Models below 2.2kW are built-in DC boost module for lower DC voltage input to reduce quantity of solar panels

# Technical specifications

| Model                               | PV580-2S-0.4-H                                  | PV580-2S-0.7-H | PV580-2S-1.5-H | PV580-2S-2.2-H | PV580-2S-3.0-H |
|-------------------------------------|-------------------------------------------------|----------------|----------------|----------------|----------------|
| PV input                            |                                                 |                |                |                |                |
| DC Max Input Voltage                | 450V                                            |                |                |                |                |
| Recommended MPPT voltage            | 100V-400V                                       |                | 360V-430V      |                |                |
| DC Max Input Current                | 15A                                             | 15A            | 30A            | 30A            | 30A            |
| Max MPPT Efficiency                 | >99%                                            |                |                |                |                |
| Number of string                    | 1                                               |                |                |                |                |
| AC Input                            |                                                 |                |                |                |                |
| Voltage                             | 200-260VAC(1PH)                                 |                |                |                |                |
| Frequency                           | 50/60Hz(±3%)                                    |                |                |                |                |
| AC Output                           |                                                 |                |                |                |                |
| Max Motor Output                    | 0.4kW                                           | 0.7kW          | 1.5kW          | 2.2kW          | 3.0kW          |
| Rated Output Voltage                | 220/230VAC(1PH/3PH)                             |                |                |                |                |
| Output Frequency range              | 0-50/60Hz                                       |                |                |                |                |
| Rated Output Current (Single Phase) | 4.2A                                            | 7.5A           | 10.5A          | 15A            | 17A            |
| Rated Output Current (Three Phase)  | 2.5A                                            | 4.2A           | 7.5A           | 9.5A           | 13A            |
| System                              |                                                 |                |                |                |                |
| Protection Grade                    | IP65                                            |                |                |                |                |
| Operating Temperature               | -25~60℃                                         |                |                |                |                |
| Cooling Way                         | Natural cooling                                 |                |                |                |                |
| Display                             | LCD                                             |                |                |                |                |
| Communication                       | RS485,4G or WIFI                                |                |                |                |                |
| Altitude                            | 3000m, above 3000m need to derate the operation |                |                |                |                |
| Noise Emission                      | <50dB                                           |                |                |                |                |
| Compliance                          | EN50178, IEC/EN62109-1, IEC61800                |                |                |                |                |
| Dimension                           | 280*440*150 (W*H*D,mm)                          |                |                |                |                |
| Package Dimension                   | 360*520*233 (W*H*D,mm)                          |                |                |                |                |
| Net weight/Gross weight (kg)        | 11.4/12.6                                       |                |                |                |                |

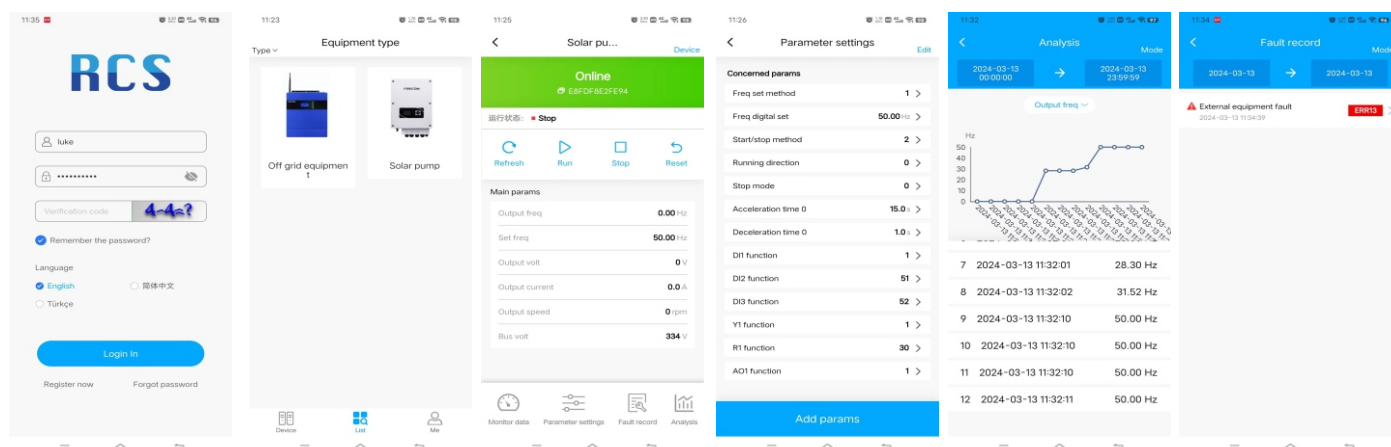
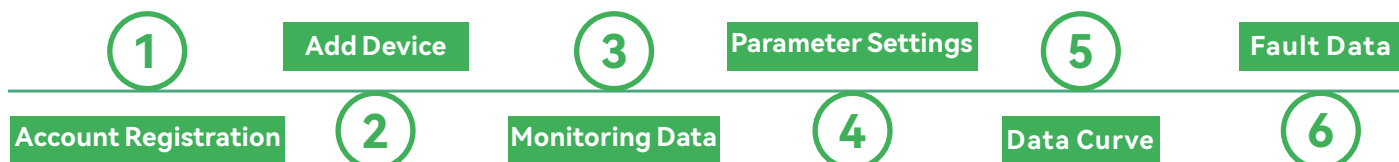
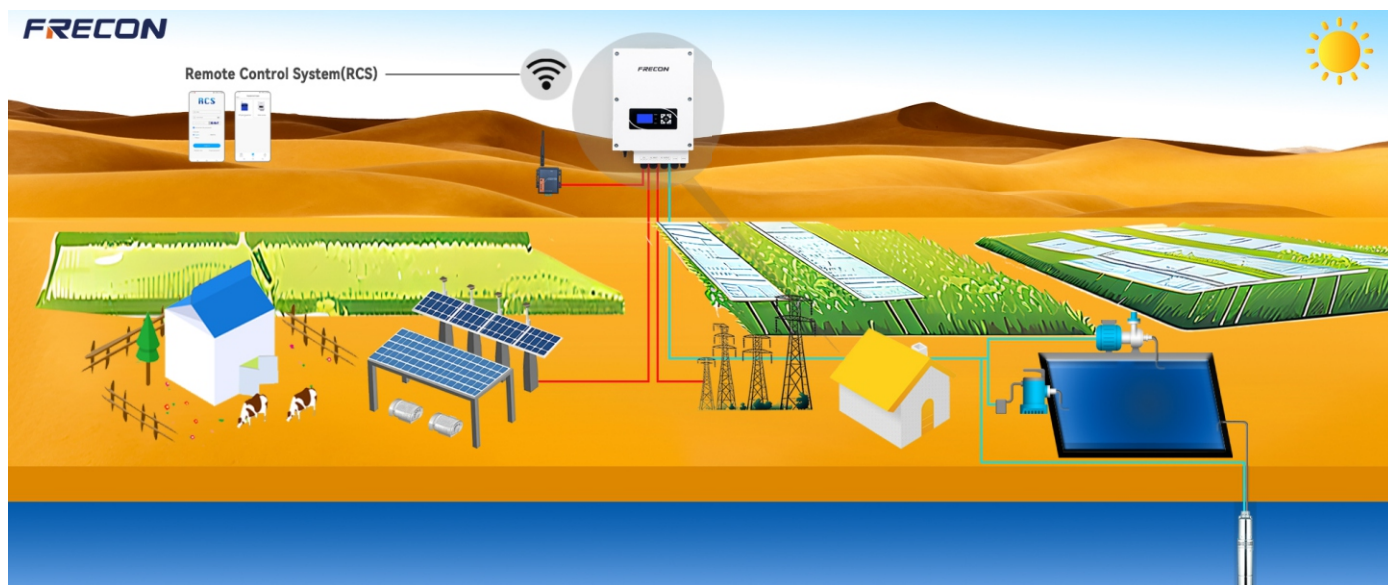
# Technical specifications

| Model                        | PV580-4T-<br>2.2-H                              | PV580-4T-<br>4.0-H | PV580-4T-<br>5.5-H | PV580-4T-<br>7.5-H | PV580-4T-<br>011-H     | PV580-4T-<br>015-H | PV580-4T-<br>018-H | PV580-4T-<br>022-H |
|------------------------------|-------------------------------------------------|--------------------|--------------------|--------------------|------------------------|--------------------|--------------------|--------------------|
| PV input                     |                                                 |                    |                    |                    |                        |                    |                    |                    |
| DC Max Input Voltage         | 900V                                            |                    |                    |                    |                        |                    |                    |                    |
| Recommended MPPT voltage     | 450V-850V                                       |                    |                    |                    |                        |                    |                    |                    |
| DC Max Input Current         | 15A                                             | 15A                | 30A                | 30A                | 37A                    | 48A                | 55A                | 67A                |
| Max MPPT Efficiency          | >99%                                            |                    |                    |                    |                        |                    |                    |                    |
| Number of string             | 1                                               |                    |                    |                    |                        |                    |                    |                    |
| AC Input                     |                                                 |                    |                    |                    |                        |                    |                    |                    |
| Voltage                      | 360-460VAC(3PH)                                 |                    |                    |                    |                        |                    |                    |                    |
| Frequency                    | 50/60Hz(±3%)                                    |                    |                    |                    |                        |                    |                    |                    |
| AC Output                    |                                                 |                    |                    |                    |                        |                    |                    |                    |
| Max Motor Output             | 2.2kW                                           | 4.0kW              | 5.5kW              | 7.5kW              | 11kW                   | 15kW               | 18.5kW             | 22kW               |
| Rated Output Voltage         | 380-460VAC(1PH/3PH)                             |                    |                    |                    |                        |                    |                    |                    |
| Output Frequency range       | 0-50/60Hz                                       |                    |                    |                    |                        |                    |                    |                    |
| Rated Output Current         | 5.5A                                            | 9.5A               | 13A                | 17A                | 25A                    | 32A                | 37A                | 45A                |
| System                       |                                                 |                    |                    |                    |                        |                    |                    |                    |
| Protection Grade             | IP65                                            |                    |                    |                    |                        |                    |                    |                    |
| Operating Temperature        | -25~60℃                                         |                    |                    |                    |                        |                    |                    |                    |
| Cooling Way                  | Natural cooling                                 |                    |                    |                    | Forced air cooling     |                    |                    |                    |
| Display                      | LCD                                             |                    |                    |                    |                        |                    |                    |                    |
| Communication                | RS485,4G or WIFI                                |                    |                    |                    |                        |                    |                    |                    |
| Altitude                     | 3000m, above 3000m need to derate the operation |                    |                    |                    |                        |                    |                    |                    |
| Noise Emission               | <50dB                                           |                    |                    |                    |                        |                    |                    |                    |
| Compliance                   | EN50178, IEC/EN62109-1, IEC61800                |                    |                    |                    |                        |                    |                    |                    |
| Dimension                    | 280*440*150 (W*H*D,mm)                          |                    |                    |                    | 340*539*187 (W*H*D,mm) |                    |                    |                    |
| Package Dimension            | 360*520*233 (W*H*D,mm)                          |                    |                    |                    | 450*650*305 (W*H*D,mm) |                    |                    |                    |
| Net weight/Gross weight (kg) | 11.4/12.6                                       |                    |                    |                    | 19.8/22.6              |                    |                    |                    |

# Technical specifications

| Model                        | PV580-4T-030-H                                  | PV580-4T-037-H | PV580-4T-045-H | PV580-4T-055-H         | PV580-4T-075-H | PV580-4T-090-H | PV580-4T-110-H |
|------------------------------|-------------------------------------------------|----------------|----------------|------------------------|----------------|----------------|----------------|
| PV input                     |                                                 |                |                |                        |                |                |                |
| DC Max Input Voltage         | 900V                                            |                |                |                        |                |                |                |
| Recommended MPPT voltage     | 450V-850V                                       |                |                |                        |                |                |                |
| DC Max Input Current         | 90A                                             | 112A           | 136A           | 168A                   | 232A           | 275A           | 338A           |
| Max MPPT Efficiency          | >99%                                            |                |                |                        |                |                |                |
| Number of string             | 1                                               |                |                |                        |                |                |                |
| AC Input                     |                                                 |                |                |                        |                |                |                |
| Voltage                      | 360-460VAC(3PH)                                 |                |                |                        |                |                |                |
| Frequency                    | 50/60Hz(±3%)                                    |                |                |                        |                |                |                |
| AC Output                    |                                                 |                |                |                        |                |                |                |
| Max Motor Output             | 30kW                                            | 37kW           | 45kW           | 55kW                   | 75kW           | 90kW           | 110kW          |
| Rated Output Voltage         | 380-460VAC(1PH/3PH)                             |                |                |                        |                |                |                |
| Output Frequency range       | 0-50/60Hz                                       |                |                |                        |                |                |                |
| Rated Output Current         | 60A                                             | 75A            | 91A            | 112A                   | 150A           | 176A           | 210A           |
| System                       |                                                 |                |                |                        |                |                |                |
| Protection Grade             | IP65                                            |                |                |                        |                |                |                |
| Operating Temperature        | -25~60℃                                         |                |                |                        |                |                |                |
| Cooling Way                  | Forced air cooling                              |                |                |                        |                |                |                |
| Display                      | LCD                                             |                |                |                        |                |                |                |
| Communication                | RS485,4G or WIFI                                |                |                |                        |                |                |                |
| Altitude                     | 3000m, above 3000m need to derate the operation |                |                |                        |                |                |                |
| Noise Emission               | <50dB                                           |                |                |                        |                |                |                |
| Compliance                   | EN50178, IEC/EN62109-1, IEC61800                |                |                |                        |                |                |                |
| Dimension                    | 520*550*240 (W*H*D,mm)                          |                |                | 660*700*313 (W*H*D,mm) |                |                |                |
| Package Dimension            | 550*830*387 (W*H*D,mm)                          |                |                | 735*765*530 (W*H*D,mm) |                |                |                |
| Net weight/Gross weight (kg) | 33.7/37.3                                       |                |                | 49/70.4                |                |                |                |

# Remote Control System(RCS)



## Features

- ▷ Monitor all devices in real time
- ▷ Can start, stop and reset the devices via the APP and Web
- ▷ Read and change the device's parameters
- ▷ Check the device's fault record
- ▷ Check monitoring parameters' data changing curves
- ▷ Check the location of the device
- ▷ Monitor the device's generated power and water yield

## Optional accessories



Breaker



WIFI Module



Filter



SPD



4G Module



Reactor

## Applications



PV580-4T-7.5 in Turkey



PV580-4T-5.5 in Afghanistan



PV580-4T-055 in Peru



PV580-4T-045 in Saudi Arabia



PV580-4T-4.0 in Kenya



PV580-4T-075 in Yemen



PV580-4T-022 in Brazil



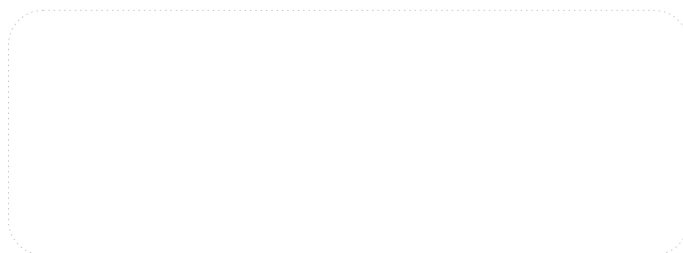
PV580-4T-7.5 in Myanmar



PV580-4T-011 in South Africa



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