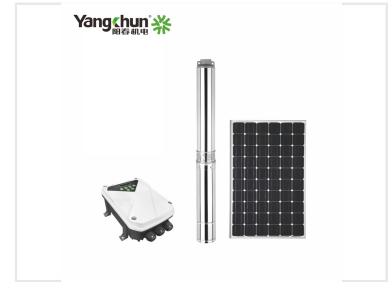


4" 4T/h DC Solar Water Pump

This 4" DC solar pump delivers a flow rate of 4 tons per hour. It is suitable for irrigation, livestock watering, and domestic water supply in off-grid locations.



ADDITIONAL IMAGES



Overview

High-Efficiency Solar Pumping Solution

This 4" DC solar water pump is powered by a high-efficiency permanent magnet brushless motor designed for direct integration with solar photovoltaic arrays. It features an advanced controller with sine wave start commutation that automatically optimizes voltage and current to maximize operating efficiency. Built for durability in off-grid environments, the system includes comprehensive automatic protection technologies to ensure a long service life for both the pump and controller.

Key Performance Metrics

Performance Highlights

4 m³/h

Max Flow Rate

3600 r/min

Rated Speed

4 inch

Pump Diameter

Technical Specifications



Comprehensive performance curves and PV array configuration guidelines for various pump models.

Model Performance Data

| Model | Power (W) | Voltage (VDC) | Max Head (m) |
|------------------------|-----------|---------------|--------------|
| 4TY4-22/4-600W/60V | 600 | 60 | 42 |
| 4TY4-30/6-750W/72V | 750 | 72 | 56 |
| 4TY4-39/9-900W/96V | 900 | 96 | 72 |
| 4TY4-52/12-1200W/110V | 1200 | 110 | 95 |
| 4TY4-67/14-1500W/110V | 1500 | 110 | 116 |
| 4TY4-100/20-2200W/280V | 2200 | 280 | 155 |

Safety & Protection

Smart Controller Functions

- Under-voltage protection to prevent battery deep discharge
- Overvoltage protection via automatic power cutoff
- Water shortage protection (auto-stop after 3 minutes)
- Automatic overload protection (auto-stop after 2 minutes)
- Automatic card machine protection with reverse operation
- High-temperature thermal protection

Protection Standards

Dry-Run Protection • Overload Protection • Low Voltage Protection • Thermal Protection

Hardware Construction

| | |
|------------------|-------------------------------------|
| Motor Technology | Permanent Magnet Brushless DC Motor |
| Pump Material | Stainless Steel |

Applications

| | |
|--------------------------|---|
| Recommended Applications | Irrigation, Livestock Watering, Domestic Water Supply, Off-grid Locations |
|--------------------------|---|

Solar Configuration

Solar Panel Configuration Examples

- 600W/60V: 2x 330W/36V (Series) or 2x 380W/40V (Series)
- 750W/72V: 3x 270W/30V (Series)
- 900W/96V: 3x 330W/36V (Series)
- 1200W/110V: 4x 330W/36V (Series)
- 2200W/280V: 10x 270W/30V (Series) or 8x 330W/36V (Series)