



Solar pumps and controllers

SOLAR CENTRIFUGAL MONOBLOCK (SURFACE / SHALLOW WELL) PUMP



www.mymecsolar.com

TESTED IN:



About Our Company

MEC Solar is a division of Mercury Electronic Corporation founded in 2016 headquartered in Bangalore, India.

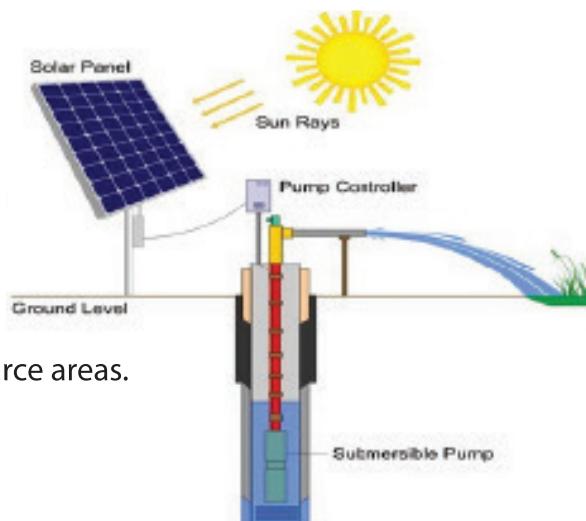
To cater to the needs of the new and emerging Indian solar market, MEC has invested in world class facilities and technologies to cater to the demands Solar pumps and industrial pumps across the Indian sub-continent. Our world class facilities in India are fully equipped to advise customers, design, test, fabricate and quality-assure on all aspects of fluid mechanics in India. Our manufacturing plant in Bangalore, is a showcase of immaculate manufacturing and engineering practices!

Manufacturing and Service Capabilities

- Plant has got capacity to produce more than 50,000 units annually.
- Fully automated assembly lines separately for surface & submersible pumps.
- In house design team for Motor, Fluid dynamics and Drive development.
- Separate Dust free room for winding and magnet assembly.
- Fully equipped ESD Electronics R&D lab for continual development.
- Separate reliability test bench for testing full system with solar simulator.
- In house Prototyping and Assembly line.
- Fully equipped team with lean manufacturing techniques to deliver product in time.
- Fully trained service engineers working in different part of the country.

Benefits of Solar Water Pump

- No fuel cost & minimum maintenance cost.
- More economical than diesel pump sets in the long run.
- Enables cultivation of an extra crop.
- Helps in providing the critical protective irrigation in water scarce areas.
- Saves time and labour.
- Improves agriculture productivity.
- Improves general quality of life with higher levels of income.
- Incremental income enables easy repayment loan taken for installing system.



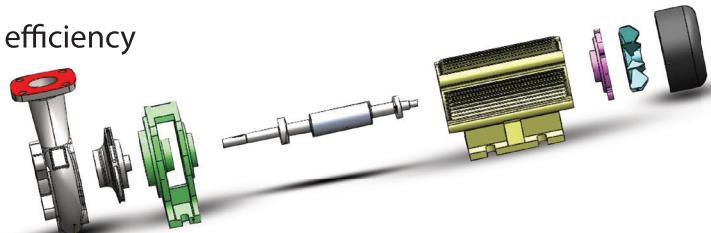
About Our Products

MEC Solar pumps are specially designed with latest technology which lowers the risk of damages and protects it from many unfavorable conditions

MEC Bore well DC & AC solar submersible pumps comprise of a comprehensive range of pumps that operate on a PV array of 500Wp to 50000Wp.

Pump & Motor

- Extremely efficient BLDC & induction Motors.
- Robust construction ensures longer life
- Rare earth magnets which can withstand temperature up to 160°C
- High quality ball bearing both sides.
- 3D Heat Transfer technology ensures low temperature rise
- Dynamically balanced rotating parts to ensures minimum vibration & long life
- High operating efficiency resulting in lower power consumption
- Specially designed for wide voltage operation
- Good suction lift characteristics
- CFD based pump design ensures best hydraulic efficiency



Controller

- Built in MPPT for maximum output.
- Sensor less Dry running protection and automatic restart.
- Thermal overload shut down to avoid damage to the Motor Or the Controller.
- Tested as per MNRE and BIS requirement.
- Warranted for 5 years.
- Remote monitoring.
- Remote start and stop.
- Short circuit protected.
- IP54 and IP65 certified enclosures.



| PUMP DETAILS | | | | | | SOLAR PANEL CAPACITY | | | DRIVE / CONTROLLER DETAILS | | | | |
|--------------|----------------|-----------------------|-----------------------------------|---------------------------|----------------------------|---------------------------|-----------------------------------|---------------|----------------------------|---------------------------|--------------------------------|---------------------------|-----------------------------|
| SL NO | Capacity in Hp | Dynamic Head in meter | Approx Discharge per day (Litres) | Suction Pipe Size in Inch | Delivery pipe size in Inch | Solar Panel capacity (Wp) | Solar Panel Configuration details | No of strings | Controller/ Drive Capacity | Input Voltage Range (VDC) | Max input Current in Amps (DC) | Drive output Voltage (AC) | Max input Power (DC) in kWp |
| 1 | 1HP | 10 | 100000 | 2" | 2" | 1200 | 320WP X 4 PANEL | 1 | 1HP | 60V - 200V | 9AMPS | 110V | 1.2 |
| 2 | 1HP | 20 | 40000 | 2" | 1.5" | 1200 | 320WP X 4 PANEL | 1 | 1HP | 60V - 200V | 9AMPS | 110V | 1.2 |
| 3 | 2HP | 10 | 172800 | 2" | 2" | 1920 | 320WP X 6 PANEL | 1 | 2HP | 130V - 450V | 9AMPS | 160V | 2.2 |
| 4 | 2HP | 20 | 108000 | 2" | 2" | 1920 | 320WP X 6 PANEL | 1 | 2HP | 130V - 450V | 9AMPS | 160V | 2.2 |
| 5 | 3HP | 10 | 288000 | 3.5" | 2.5" | 3060 | 340WP X 9 PANEL | 1 | 3HP | 150V - 470V | 9AMPS | 230V | 3.5 |
| 6 | 3HP | 20 | 172800 | 2.5" | 2" | 3060 | 340WP X 9 PANEL | 1 | 3HP | 150V - 470V | 9AMPS | 230V | 6 |
| 7 | 3HP | 30 | 72000 | 2" | 1.5" | 3060 | 340WP X 9 PANEL | 1 | 3HP | 150V - 470V | 9AMPS | 230V | 6 |
| 8 | 5HP | 10 | 351000 | 3" | 2.5" | 4800 | 320WP X 15 PANEL | 1 | 5HP | 250V - 780V | 9AMPS | 380V | 6 |
| 9 | 5HP | 20 | 276900 | 2.5" | 2" | 4800 | 320WP X 15 PANEL | 1 | 5HP | 250V - 780V | 9AMPS | 380V | 6 |
| 10 | 5HP | 30 | 255450 | 2.5" | 2" | 4800 | 320WP X 15 PANEL | 1 | 5HP | 250V - 780V | 9AMPS | 380V | 6 |
| 11 | 7.5HP | 20 | 624000 | 4" | 3" | 7680 | 320WP X 24 PANEL | 2 | 7.5HP | 250V - 780V | 18 AMPS | 380V | 8 |
| 12 | 7.5HP | 30 | 358800 | 3" | 2.5" | 7680 | 320WP X 24 PANEL | 2 | 7.5HP | 250V - 780V | 18 AMPS | 380V | 8 |
| 13 | 7.5HP | 35 | 312000 | 3" | 2.5" | 7680 | 320WP X 24 PANEL | 2 | 7.5HP | 250V - 780V | 18 AMPS | 380V | 8 |
| 14 | 10HP | 30 | 423150 | 3" | 2.5" | 10540 | 310WP X 34 PANEL | 2 | 10HP | 250V - 780V | 18 AMPS | 380V | 12 |
| 15 | 10HP | 40 | 370500 | 2.5" | 2" | 10540 | 310WP X 34 PANEL | 2 | 10HP | 250V - 780V | 18 AMPS | 380V | 12 |
| 16 | 10HP | 50 | 308100 | 2.5" | 2" | 10540 | 310WP X 34 PANEL | 2 | 10HP | 250V - 780V | 18 AMPS | 380V | 12 |
| 17 | 10HP | 60 | 300300 | 2.5" | 2" | 10540 | 310WP X 34 PANEL | 2 | 10HP | 250V - 780V | 18 AMPS | 380V | 12 |
| 18 | 12.5HP | 30 | 616200 | 4" | 2" | 13020 | 310WP X 42 PANEL | 3 | 12.5HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 19 | 12.5HP | 40 | 491400 | 4" | 3" | 13020 | 310WP X 42 PANEL | 3 | 12.5HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 20 | 12.5HP | 50 | 253500 | 2.5" | 3" | 13020 | 310WP X 42 PANEL | 3 | 12.5HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 21 | 12.5HP | 60 | 241800 | 2.5" | 2" | 13020 | 310WP X 42 PANEL | 3 | 12.5HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 22 | 15HP | 30 | 663000 | 4" | 2.5" | 15360 | 320WP X 48 PANEL | 3 | 15HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 23 | 15HP | 40 | 546000 | 4" | 2.5" | 15360 | 320WP X 48 PANEL | 3 | 15HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 24 | 15HP | 50 | 304200 | 3" | 2.5" | 15360 | 320WP X 48 PANEL | 3 | 15HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 25 | 15HP | 60 | 265200 | 2.5" | 2" | 15360 | 320WP X 48 PANEL | 3 | 15HP | 250V - 780V | 24 AMPS | 380V | 16 |
| 26 | 20HP | 40 | 635700 | 4" | 2.5" | 20480 | 320WP X 64 PANEL | 4 | 20HP | 250V - 780V | 32 AMPS | 380V | 20 |
| 27 | 20HP | 50 | 546000 | 4" | 2.5" | 20480 | 320WP X 64 PANEL | 4 | 20HP | 250V - 780V | 32 AMPS | 380V | 20 |
| 28 | 20HP | 60 | 388050 | 3" | 2.5" | 20480 | 320WP X 64 PANEL | 4 | 20HP | 350V - 780V | 32 AMPS | 380V | 20 |
| 29 | 20HP | 70 | 273000 | 2.5" | 2" | 20480 | 320WP X 64 PANEL | 4 | 20HP | 350V - 780V | 32 AMPS | 380V | 20 |
| 30 | 20HP | 80 | 156000 | 2.5" | 2" | 20480 | 320WP X 64 PANEL | 4 | 20HP | 350V - 780V | 32 AMPS | 380V | 20 |
| 31 | 30HP | 50 | 702000 | 4" | 3" | 29325 | 345WP X 85 PANEL | 5 | 30HP | 250V - 780V | 45 AMPS | 380V | 30 |
| 32 | 40HP | 50 | 936000 | 4" | 4" | 40460 | 340WP X 119 PANEL | 7 | 40HP | 350V - 780V | 60 AMPS | 380V | 45 |
| 33 | 50HP | 50 | 1248000 | 6" | 5" | 50490 | 330WP X 153 PANEL | 1 | 50HP | 350V - 780V | 75 AMPS | 380V | 55 |

— N E T W O R K —



Factory Address:
MERCURY ELECTRONIC CORPORATION

Survey No. 91/1, Kanakadasa layout Seegehalli,
Off Magadi Main Road,
Bangalore - 560091, India
www.mymecsolar.com

OUR CHANNEL PARTNERS

— ACROSS GLOBE —



Factory Address:
MERCURY ELECTRONIC CORPORATION

Survey No. 91/1, Kanakadasa layout Seegehalli,
Off Magadi Main Road,
Bangalore - 560091, India
www.mymecsolar.com