Empowering Sustainability, ENERGIZING

FUTURE



IOT Enabled IP-65 Solar Pump Controller







www.desireenergy.com



About Us

We, Desire Energy Solutions Pvt Ltd, is a national award-winning tech-driven water management company, headquartered in Jaipur, with business interests in energy efficiency, renewable energy, engineering, technology, construction, and manufacturing in the public and agriculture water sector.

We are counted among the leading manufacturers of solar pump controllers having an experience of 10+ years and 10000+ solar pumping stations installation in various government schemes such as PM-KUSUM component B, Panghat Yojna and departments such as PHED Rajasthan, GWSSB, Gujarat, and many others.

After years of experience, dedicated work, and collaboration, we are proud to share a product that embodies cutting-edge technology, superior quality, and unmatched functionality. We are thrilled to unveil a groundbreaking innovation that is set to transform the Solar pump controller landscape – introducing SunAquator 2.0!

Vision

Making public water infrastructure smart, efficient and sustainable.

Mission

To provide water management solutions to every nook and corner of India.

Values







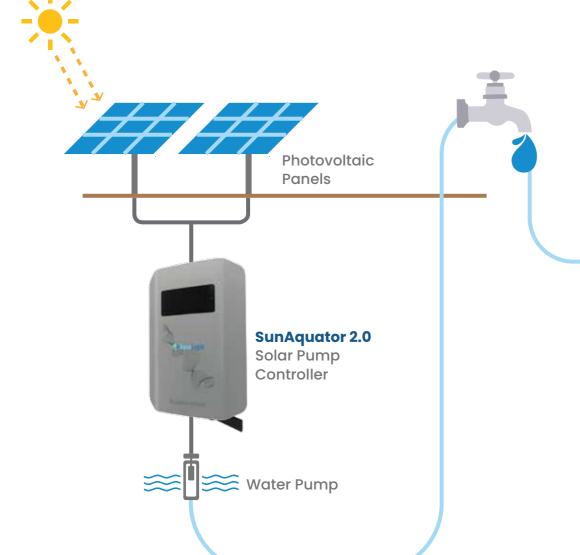


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SunAquator Applications





Irrigation (45,000)

The Sunaquator Solar Pump Controller is widely used for irrigation systems in areas where electricity is not available providing a sustainable and efficient solution for water management in agriculture.



Ground Water Supply (35,000+)

The Sunaquator Solar Pump Controller is effectively used in groundwater supply systems in various solar DFU and Non-DFU units, offering a sustainable and reliable solution for drinking water supply.



Community Water Supply (35000+)

Solar pumps can be used to provide clean water to entire communities, powering water treatment facilities and distribution networks

















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SunAquator 2.0, not a conventional VFD but a PCB based controller, which has the potential to revolutionize the way solar pump controller operates and provide solutions that were previously unimaginable. We invite you to be a part of this exciting journey and experience firsthand the transformational power of SunAquator.

10+

Years of Experience

50,000+ Installations.



Biggest Heat Sink for Longest Life



As per the



FOTA





In-built IoT-enabled RMS, Compatible with 3G/4G





Easy Plug & Play
User-Friendly Seamless Integration



Key Features and Benefits

10+

Years of Experience

50,000+

As per the MNRE Guidelines



Integrated **RMS Module.**



Protection level **IP 65.**



Full **RMS Support.**



Compact Design with **Plug-and-Play** System.



Easy & Quick **SIM Installation.**



Supports **SKD Modular Design.**



Longer Life compared to conventional VFD.



Operation through **Mobile App.**



24X7 Service Support through Toll-Free Number.



FRP Body specially designed for Field Conditions.



Biggest Heat Sink, for proper cooling given Long Life.



Specially Designed for Solar Pumps to ensure Maximum Water Production.



Integrated Modem enabled to Transfer Data on Two Parallel Servers (client/government).



Shock Proof and **Corrosion Free Body** for Product Life Longevity.



IoT-Enabled Software and Mobile Application Supportfor Monitoring, Operations, and Maintenance.



Product Specifications

Communication	MQTT Enabled				
Cellular Technology	4G (LTE-FDD 81/83/85/88) (LTE-TD 843/838/839/840/841)				
SIM Card Compatibility	1.8V/3V SIM Card				
GNSS	GPS Supported				
Antenna	High DBi Flexible Sticker Antenna LTE + GPS				
Bluetooth	BLE 5.0 Supported				
Communication Channel	RS-485				
Communication Type	Modbus -Master -RTU				
Display	128*64 Backlit Graphical LCD / 16*2 Alpha Numeric Display				
Keypad	External Keypad Supported				
Communication Protocol with Server	MQTT with Security of TLS/SSL/X.509 Certificate.				
Configuration	Via Web Site				
Temp	Temp Range 0-85 °C				
Boot Time	5 Sec				
Voltage Ranges	3HP & 5HP- 100 To 450 VDC & 7HP & 10HP- 300 To 900 VDC				
The parameters available on the controller display/ screen	 Pump On/Off status. Array Input DC Voltage DC/AC output Current & voltage Operating frequency Latest RMS Latitude Latest RMS Longitude Pump Capacity (HP) PV Module Capacity (KW) Pump Status. Current Generation (kW) Today Solar Generation (kWh) Cumulative Solar Generation (kWh) Today Runs Hours (Hrs.) Cumulative Pump Run Hours (Hrs.) 				



Technical Specifications



KUSUM Solar Motor Pump Set- AC Submersible (Cast Iron & Stainless Steel)

S. No.	Model	Motor	Pump	HP	Stage	Head Mtr	Duty Point Discharge (LPM)
1.	DESPL4M6MFF17	4"	6"	3	5	30	269
2.	DESPL4RFF09	4"	4"	3	13	50	162
3.	DESPL4RFF09	4"	4"	3	17	70	108
4.	DESPL6MFF30	6"	6"	5	4	30	431
5.	DESPL6MFF12	6"	6"	5	8	50	258
6.	DESPL6MFF09	6"	6"	5	11	70	172
7.	DESPL4RFF09	4"	4"	5	25	100	111
8.	DESPL6MFF30	6"	6"	7.5	4	30	606
9.	DESPL6MFF30	6"	6"	7.5	6	50	363
10.	DESPL6MFF12	6"	6"	7.5	12	70	242
11.	DESPL6MFF09	6"	6"	7.5	16	100	156
12.	DESPL6MFF46	6"	6"	10	5	30	808
13.	DESPL6MFF30	6"	6"	10	8	50	458
14.	DESPL6MFF17	6"	6"	10	11	70	323
15.	DESPL6MFF12	6"	6"	10	16	100	208

KUSUM Solar Motor Pump Set- DC Submersible (Cast Iron & Stainless Steel)

S. No.	Model	Motor	Pump	НР	Stage	Head Mtr	Duty Point Discharge (LPM)
1.	DESPL4RFF09	4"	4"	2	6	30	-
2.	DESPL4M6MFF17	4"	6"	3	4	30	292
3.	DESPL4RFF09	4"	4"	3	10	50	177
4.	DESPL4RFF09	4"	4"	3	13	70	115
5.	DESPL4M6MFF30	4"	6"	5	4	50	468
6.	DESPL4M6MFF09	4"	6"	5	7	50	283
7.	DESPL4M6MFF09	4"	6"	5	10	70	185
8.	DESPL4RFF09	4"	4"	5	20	100	129
18.	DESPL4M6MFF30	4"	6"	7.5	4	30	658
11.	DESPL4M6MFF30	4"	6"	7.5	7	50	398
12.	DESPL4M6MFF09	4"	6"	7.5	11	70	260
	DESPL4M6MFF09	4"	6"	7.5	13	100	182



Awards & Recognition





Certificates



by CRISIL, for the high performance and financial strength



with CE Marketing. (NABAL, NISEERDA, TUV)



Financing & ESCO Model in Energy Efficency by CII



Certified by Ministry of New/Renewable Energy, Government of India



Gertified ESCO Comp any by Bureau of Energy Efficiency, Government of India



Capability Maturity Model Integration Certification

Clients













State Water & Sanitation Mission















Contact Us





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