

Enhancing Solar Pump Efficiency with Vi Business IoT Connectivity.

PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan) Scheme, has been launched by the Ministry of New and Renewable Energy (MNRE) for setting up subsidized solar pumps and distributed solar power plants across the country.

A leading manufacturer of energy-efficient solar pumps is supporting this one of the biggest initiatives in the world to provide clean energy to more than 3.5 Mn farmers across India.



Business Challenge

- Remote Monitoring Requirements: Solar pumps installed in remote village sites needed real-time monitoring and performance metrics.
- Energy Consumption Insights: The manufacturer wanted to monitor their energy usage pattern as they aimed to be more efficient.
- Scalability: The multitude of thousands of distributed pumps required a centralised and automated system to reduce manual oversight.



Our Solution

After a detailed assessment of their needs, we offered the following IoT Solutions that could resolve their issues.

• We collaborated with the solar pump manufacturer to offer them IoT connectivity solution that utilised M2M SIMs with a Private APN.

- The manufacturer was able to monitor pumps remotely using IoT-enabled smart solar pumps, ensuring that pumps were operating smoothly and tracking the energy being generated remotely.
- Our centralised IoT connectivity management platform provided real-time visibility into all deployed pumps through a centralised dashboard.
 This allowed them to control thousands of pumps from a single point.
- The platform also enabled remote diagnostics and troubleshooting,
 as well as real-time alerts on usage for monitoring and analysis.
- This allowed farmers to remotely turn pumps on or off, making operation easier and more efficient.



Business Impact

Here's how the solar pump manufacturer benefited from our IoT solutions:

- Vi Business IoT connectivity solution ensured uninterrupted access to solar pumps, even in the most remote locations.
- The centralised IoT platform provided enhanced visibility, transparency,
 and control over the entire network of smart solar pumps.
- Nationwide coverage and the advanced IoT platform enabled complete control and management of every connected device.
- Operational costs were significantly reduced by minimising manual intervention and streamlining pump management.