

Solar Panel Monitoring and Data Logger

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Abstract: *This project proposes the development of a solar panel monitoring and data logging system aimed at enhancing the efficiency and maintenance of solar energy installations. The system incorporates sensors to measure parameters such as sunlight intensity, temperature, and voltage output from the solar panels. Data collected from these sensors are logged into a centralized database for analysis and visualization. Additionally, the system includes features for real-time monitoring. By providing comprehensive data analytics and remote monitoring capabilities, this system offers valuable insights for optimizing solar panel performance and ensuring reliable energy generation. Furthermore, the project emphasizes originality in its design and implementation, prioritizing innovation and uniqueness to deliver a robust solution for solar panel management*

Keywords: Photovoltaic system, Energy efficiency, Real-time monitoring, Solar energy data, Performance Metrics