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## **IoT-Based Solar Monitoring**

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Abstract: An Internet of Things (IoT) based Solar Monitoring System is designed to enhance the efficiency and reliability of solar power generation. This system employs a network of connected sensors and devices to collect real-time data from solar panels, inverters, and other relevant components. By utilizing IoT technology, the system enables remote monitoring and control, allowing users to access critical information about solar power generation from anywhere in the world.

The core functionality of the system involves monitoring key parameters such as solar irradiance, panel temperature, and energy output. These data points are transmitted to a centralized platform where they are processed and analyzed. Through advanced analytics, the system can identify patterns, predict potential issues, and optimize performance to maximize energy yield.

Keywords: IOT- Internet Of Things, Cloud Platform, Monitoring, and Real-Time Performance.

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