

Solar Powered Portable Wind Speed and Wind Direction Data Acquisition using LattePanda

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Abstract: *This study presents the development and implementation of a Portable Wind speed and wind direction data acquisition system using LattePanda. The integration of components, including anemometer, solar panel, charger, and battery, creates a functional system for accurate wind data collection. Wind data gathered from January to March offers insights into wind patterns and potential energy generation. Limitations, such as maximum wind speed measurement and operational duration, are recognized. The study's implications for the renewable energy sector, informed decision-making in wind turbine projects, and recommendations for future enhancements are discussed. In sum, this study contributes to informed sustainable energy decisions, advancing the transition to cleaner energy sources.*

Keywords: Wind Data Acquisition, LattPanda, Solar Powered

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