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# Wireless Solar Grass Cutter

**K. Amarender[1], G. Sandhya Rani[2], G. Uma Rani[3], D. Sandeep[4], B. Chandini[5], K. Sushma[6]**
Assistant Professor, Dept. of Electronics & Communication Engineering[1]
UG Students, Dept. of Electronics & Communication Engineering[2-6]
Christu Jyothi Institute of Technology & Science, Jangaon, Telangana, India
amaranvik@gmail.com, gadesanjana2004@gmail.com, uma92879@gmail.com
sandeepdamera859@gmail.com, Chandinibashipaka@gmail.com, sushmakommu8@gmail.com

**Abstract**: *This research introduces a sustainable, wireless, solar-powered grass-cutting system designed to overcome the environmental and operational limitations of conventional grass cutters. By utilizing photovoltaic panels to capture solar energy, the system efficiently powers a cutting motor along with a wireless control interface. The cutter can be remotely navigated, reducing manual labor requirements while promoting operational safety. The integration of obstacle detection further enhances the system's functionality. Experimental analysis demonstrates stable performance across varying lighting conditions, making it suitable for domestic, agricultural, and institutional applications. This system not only reduces carbon emissions but also represents a step toward intelligent and sustainable lawn care solutions. Additionally, the project encourages the adoption of green technology in household and commercial landscaping practices, contributing to global climate goals by reducing fossil fuel dependency in everyday tools.*

**Keywords**: Solar-powered system, wireless control, grass cutter, renewable energy, automation, eco-friendly technology



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