

A Solar Powered Portable Ventilator for Use in Remote Areas

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The project focuses on the development of a solar powered, portable respirator system that utilizes an Ambu bag and incorporates an LCD user interface to allow for the setting of specific parameters. The system is designed to be adaptable to various settings, making it an ideal solution for use in low-resource or remote healthcare environments. By harnessing the power of renewable energy, it offers a sustainable and cost-effective alternative to traditional, electrical-powered respirators, while also providing greater mobility and versatility to healthcare providers. The project employs an iterative design approach, combining bioengineering principles with technological advancements to create a solution that addresses the healthcare needs of developing communities.