

Solar Powered Remote Sensors for the IoT

Solar powered hybrid devices with on-board energy storage can enable compact remote sensing devices that collect and transmit field data to the cloud to support 24/7 monitoring and surveying applications.

Competitive advantage

- Expertise in photovoltaics and energy storage
- Practical experience in fabrication of hybrid devices
- Expertise in durable device encapsulation
- Circuit and device modelling/simulation expertise

Impact

- Self-powered sensors and devices to enable monitoring and/or survey data to be collected from remote areas and assimilated via cloud computing into historical and/or predictive models
- Hybrid photovoltaic and storage functionality for solar-powered devices and tools, and medical implants

Successful applications

• Demonstrated hybrid device based on a commercially-produced silicon solar cell

Capabilities and facilities

- Extensive expertise in both photovoltaics and energy storage research
- State-of-the-art laboratory facilities for both photovoltaics and energy storage research and fabrication of hybrid devices

More Information

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