

Thin Film Batteries: -- Markets Reach \$3.4 Billion By 2021

LEXINGTON, Massachusetts (April 30, 2015) – WinterGreen Research announces that it has published a new study Thin Film Batteries: Market Shares, Strategy, and Forecasts, Worldwide, 2015 to 2021. The 2015 study has 329 pages, 110 tables and figures. Thin Film Batteries offer quality for powering implantable medical devices, hearing aids, RFID tags, and wearable electronics.

Thin film battery market driving forces include creating business inflection by delivering technology that supports entirely new capabilities. Sensor networks are creating demand for thin film solid state devices. Vendors doubled revenue and almost tripled production volume from first quarter. Multiple customers are moving into production with innovative products after successful trials.

A strong business pipeline has emerged with customer activity in all target markets. The market focus is shifting from ramping capacity to driving manufacturing efficiencies and achieving margin improvement, indicating increasing market maturity.

The quality of energy storage is better with thin film batteries. Thin Film Batteries A comparison of battery performance for various rechargeable batteries is a compelling illustration of the value of thin film batteries. Data for thin film batteries using very thin substrates illustrate the longer cycle life that can be achieved. Applications include power bridging, permanent power, and wireless sensor networks..

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Smarter computing is part of an IT opportunity, brought by the availability of many, many devices that measure what is going on in the world. These devices are made possible by the availability of small, inexpensive, reliable batteries that provide battery backup on the printed circuit board. Smarter computing is related to achieving a more instrumented, interconnected and intelligent infrastructure.

Software and onboard storage are significant aspects of making the networks more intelligent. The need to capture and analyze increasing amounts of data, deliver results to more users, and respond faster across all devices, without a corresponding increase in budget is a function of better management and better systems. Back up power is part of the picture.

Key application areas for thin film batteries are:

- Medical implants
- Hearing aids
- RFID tags
- Electronic wearable devices
- Smart cards

Key application areas for solid state batteries are:

- Power bridging
- Permanent power
- Wireless sensors

As energy harvesting and wireless sensor networks evolve, the thin film batteries provide an uninterruptable, stable power source that lasts as long as the electronics with which it is packaged. In some cases, changing batteries is not feasible, and these applications are illustrative of those kinds of instances.

According to Susan Eustis, the lead author of the team that created the study, “Thin film batteries for electronics brings advantages to batteries of less weight, lower cost potentially, higher energy density eventually, and a smaller footprint. Substantially increasing the energy density while lowering costs is the aim of this industry segment. While this has not yet been achieved, it will be done and those who achieve the breakthrough stand to benefit substantially.”



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Thin film battery markets at \$35 million in 2014 are forecast to reach \$3.4 billion by 2021. Rapid growth toward the end of the forecast period is anticipated as technology improves the cost structure of the manufacturing.

WinterGreen Research is positioned to help customers face challenges that define the modern enterprises. The increasingly global nature of science, technology and engineering is a reflection of the implementation of the globally integrated enterprise. Customers trust WinterGreen Research to work alongside them to ensure the success of the participation in a particular market segment.

WinterGreen Research supports various market segment programs; provides trusted technical services to the marketing departments. It carries out accurate market share and forecast analysis services for a range of commercial and government customers globally. These are all vital market research support solutions requiring trust and integrity.

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