

WINTERGREEN RESEARCH, INC.

**Radio Frequency Identification (RFID) Market  
Opportunities, Strategies, and Forecasts, 2005 to 2010**

**Radio Frequency Identification (RFID)**



*Picture by Susie Eustis*

**MOUNTAINS OF OPPORTUNITY**

**WinterGreen Research, Inc.  
Lexington, Massachusetts**

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**CHECK OUT THESE KEY TOPICS**

*RFID MARKET SHARES*  
*RFID MARKET FORECASTS*  
*Technical Challenges*

**RFID Key Concepts**

Target Markets  
Customer Base

*ROADBLOCKS*

*RFID STANDARDS*

*BASIC CONCEPTS*

*RFID HF vs UHF*

*WIRELESS LAN RF NETWORKING SYSTEMS*

*RFID GOVERNMENT REGULATIONS*

*INKJET PRINTING*

*RFID WITH A BATTERY*

*RFID TAG MAGNETIC FIELD*

*PHARMACEUTICAL TRACKING*

**OPPORTUNITY ABOUND**

WinterGreen Research, Inc.

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## **Radio Frequency Identification (RFID) Market Opportunities, Strategies, and Forecasts, 2005 to 2010**

**RFID EPC tags represent a high growth market segment in RFID. Markets grow at a solid pace through 2009 when tag prices decline to a penny, then expand. EPC tags are used in retail and the supply chain.**

**If the market reached shipment in the trillions of tags, costs would be decreased even more significantly by the use of nanoparticles that would be applied to paper in the manner that ink is applied now.**

**RFID markets at \$503 million in 2004 are anticipated to impact multiple market segments including tracking cases and asset management. These applications are anticipated to drive market growth for radio frequency identification technology at an average of 67 percent to more than \$3.8 billion in 2011. Major initiatives relate to retailer ability to use electronic tags to track inventory from warehouses to stores.**

**Implementation plans by Wal-Mart, Tesco, Metro AG and Target, along with the U.S. Department of Defense, has set a pace for rapid growth.**

**Improvements in asset management and return on invested capital are all derived from greater visibility to inventory and shipments while in transit. This benefit requires that trading partners, especially carriers and transportation providers, improve their infrastructures to capture this information and then make it available to the manufacturers and retailers.**

## Companies Profiled

### Market Leaders

Mark IV Industries  
Intermec

### Market Participants

Alien	Applied Wireless Identification
Atmel	Avery Dennison
Cadre Technologies	Checkpoint Systems
Ember	Swatch Group/EM Microelectronics
ESYNC	Fujitsu
GlobeRanger	Hewlett-Packard (HP)
IBM	Microsoft
International Paper	OAT Systems
Oracle	Radianse
RedPrairie	RF Code
Roper Industries/TransCore	Royal Philips Electronics
SafeTzone Technologies	SAMSys Technologies
Savi Technology	Seeburger
Shuffle Master	SIRIT
Sundex	Symbol Technologies
Tagsys	Texas Instruments
TransCore Toll Collection Systems	Tyco/ADT Secutiry
Unova	UPM RAFSEC
Wannado Entertainment & Wannado City	Zebra Technologies

# Radio Frequency Identification (RFID) Strategies and Forecasts, 2005-2010

## REPORT METHODOLOGY

THIS IS THE *TWO-HUNDRED AND THIRTY-FIFTH* REPORT IN A SERIES OF MARKET RESEARCH REPORTS THAT PROVIDE FORECASTS IN COMMUNICATIONS, TELECOMMUNICATIONS, THE INTERNET, COMPUTER, SOFTWARE, TELEPHONE EQUIPMENT, HEALTH EQUIPMENT, AND ENERGY. THE PROJECT LEADERS TAKE DIRECT RESPONSIBILITY FOR WRITING AND PREPARING EACH REPORT. THEY HAVE SIGNIFICANT EXPERIENCE PREPARING INDUSTRY STUDIES. FORECASTS ARE BASED ON PRIMARY RESEARCH AND PROPRIETARY DATA BASES. FORECASTS REFLECT ANALYSIS OF THE MARKET TRENDS IN THE SEGMENT AND RELATED SEGMENTS. UNIT AND DOLLAR SHIPMENTS ARE ANALYZED THROUGH CONSIDERATION OF DOLLAR VOLUME OF EACH MARKET PARTICIPATION IN THE SEGMENT. INSTALLED BASE ANALYSIS AND UNIT ANALYSIS IS BASED ON INTERVIEWS AND AN INFORMATION SEARCH. MARKET SHARE ANALYSIS INCLUDES CONVERSATIONS WITH KEY CUSTOMERS OF PRODUCTS, INDUSTRY SEGMENT LEADERS, MARKETING DIRECTORS, DISTRIBUTORS, LEADING MARKET PARTICIPANTS, OPINION LEADERS, AND COMPANIES SEEKING TO DEVELOP MEASURABLE MARKET SHARE. OVER 200 IN DEPTH INTERVIEWS ARE CONDUCTED FOR EACH REPORT WITH A BROAD RANGE OF KEY PARTICIPANTS AND INDUSTRY LEADERS IN THE MARKET SEGMENT. WE ESTABLISH ACCURATE MARKET FORECASTS BASED ON ECONOMIC AND MARKET CONDITIONS AS A BASE. USE INPUT/OUTPUT RATIOS, FLOW CHARTS, AND OTHER ECONOMIC METHODS TO QUANTIFY DATA. USE IN-HOUSE ANALYSTS WHO MEET STRINGENT QUALITY STANDARDS. INTERVIEWING KEY INDUSTRY PARTICIPANTS, EXPERTS AND END-USERS. OUR RESEARCH INCLUDES ACCESS TO LARGE PROPRIETARY DATABASES. LITERATURE SEARCH INCLUDES ANALYSIS OF TRADE PUBLICATIONS, GOVERNMENT REPORTS, AND CORPORATE LITERATURE.

**YOU MUST HAVE THIS STUDY**

# Radio Frequency Identification (RFID) Market Opportunities, Strategies, and Forecasts, 2005 to 2010

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