

Award Description

Frost & Sullivan's Product Innovation of the Year Award is bestowed on the company that has best demonstrated a superior ability to develop and/or advance innovative products vis-a-vis products from competing vendors. This Award recognizes the company's successful adoption or invention of new technology that has become a part of a well-designed product family. This Award also recognizes the company's successful product development strategies and the degree the product has met customer stated needs and requirements. Such innovation is expected to significantly contribute to the industry in terms of market acceptance.

Research Methodology

To choose the Award recipient, Frost & Sullivan's analyst team tracks developments in a particular field of technology with a set of predetermined qualitative and quantitative measurements. The selection process includes primary participant interviews and/or interviews with end users, distributors, suppliers as well as extensive primary and secondary research via the bottom-up approach. Companies' products are analyzed based on the degree of innovation, the estimated market penetration rate, and the acceptance of the product by intended end users. Industry participants are ranked and the top performing company is chosen for the Award.

Measurement Criteria

In addition to the methodology described above, there are specific criteria used to determine final competitor rankings in this industry. The recipient of this Award has excelled based on one or more of the following criteria:

- Significance of the product(s) in terms of enhancing a company's competitive position
 - Competitive advantage of the product(s) in the market
 - Response to end user needs
 - Product(s) quality
 - Degree the product(s) has contributed added-value to end users
 - Acceptance or potential market acceptance of the product(s)
-

2005

FROST & SULLIVAN

Ultra Wideband Technology
Product Innovation of the Year Award*Multispectral Solutions, Inc.**Multispectral Solutions, Inc.*[®]

Frost & Sullivan's 2005 Product Innovation of the Year Award in the field of Ultra Wideband (UWB) technology goes to Multispectral Solutions, Inc. (MSSI) in recognition of the company's exemplary efforts toward advancing UWB product technology for RFID, wireless communications, radar and geo-positioning. A pioneer in the field of UWB technology, MSSI has a 20-year history of UWB development and deployment for government, military and other establishments.

Wireless communications and networking represent ever-expanding markets characterized by rapid innovations in application-specific standards and technologies. In recent years, RFID and short-range communications have garnered increased attention, with an emphasis toward developing innovative platforms that address the demands of these markets. End users are now increasingly demanding not only high-bandwidth, short-range wireless connectivity, but location-aware products as well which address such diverse requirements as RFID and inventory control, automated manufacturing processes, personnel and asset tracking, etc.

Ultrawideband (UWB), a high-speed, short-range wireless technology, is ideal for seamlessly transferring digital content between multimedia devices. Apart from applications in the communications arena, UWB technology has been demonstrated to possess unique advantages for precision localization applications. The uniqueness lies in its unrivaled performance in providing 2D/3D precision localization even in severe multipath environments. Furthermore, while operating under the new FCC regulations for UWB emissions, precision asset tracking systems built based on UWB technology enable reduced data rates, and hence can use significantly higher peak powers than those admissible for high data rate communications systems.

MSSI, a Germantown, Maryland-based company, has many firsts to its credit including the development of the innovative PAL650™, Precision Asset Location system, the world's first FCC-certified, UWB-based, active RFID and tracking system. This system enables real-time tracking and identification of assets and personnel with a high range and precision, virtually unrivaled by traditional RFID solutions. Leveraging this proprietary solution, MSSI recently announced the release of a new 'Sapphire' product line, Sapphire DART (Digital Active Real Time Tracking), billed as the world's first 'commercially viable' UWB product. The hallmark of this product line is that it enables users with a scalable architecture, and facilitates RFID and precision localization to a 4-inch resolution for large-scale industrial and commercial applications. It also features extended read ranges of 600 feet, one foot tracking resolution, compact size and an extended battery life. The company also recently received ULI604 safety certification for its UWB RFID tags, permitting their use in hazardous environments, a major milestone for active RFID tags.

MSSI has strategically chosen to focus on applications that include highly multipath resistant UWB communications for military and commercial applications, short range UWB radar for collision avoidance and intrusion detection, and real-time RFID, tracking and precision geo-location systems for personnel and asset tracking. To expand technology usage, MSSI has completed over thirty successful RFID pilots covering a wide range of asset management, including real time tracking of material handling equipment and personnel.

In a testament to the company's technology vision and validating the importance of innovation in such dynamic markets, MSSI has been able to successfully develop a strong and sufficiently diverse UWB intellectual property portfolio. Further, with its proprietary UWB receiver technology, MSSI has proven its technology's ability to effectively detect single pulses of UWB energy with exceedingly high sensitivity,

2005

FROST & SULLIVAN

Ultra Wideband Technology
Product Innovation of the Year Award

Multispectral Solutions Inc.



in the presence of high interference.

In summary, Frost & Sullivan's Award for Product Innovation recognizes Multispectral Solutions Inc.'s pivotal role in advancing UWB product technology and for developing innovative UWB product solutions, most notably the 'Sapphire DART'. This solution, which represents the next generation in real time location technology and overcomes limitations with passive RFID and WiFi-based solutions, has the potential to significantly impact a broad array of industries.



Multispectral Solutions, Inc.®