

## **New Product Innovation Award Low Frequency Portable RF Test Equipment Global, 2012**

### **Frost & Sullivan's Best Practices Awards**

Frost & Sullivan Best Practices Awards identify exemplary achievements within a multitude of industries and functional disciplines. The analysis on best practices that we conduct identifies companies, products, processes, and executives that have achieved world-class performances. This research is an invaluable source to companies for new ideas to improve strategies and processes, which ultimately drive corporate growth. These achievements are recognized with Frost & Sullivan Best Practices Awards. Based on the findings of this Best Practices research, Frost & Sullivan is pleased to present the 2012 Global New Product Innovation Award in Low Frequency Portable RF Test Equipment to Oscium.

### **Significance of the New Product Innovation Award**

#### **Key Industry Challenges**

As the General-Purpose Test Equipment industry continues to mature, the user interface will serve as a battleground for leading companies in this space in the future, prompting their interest in its evolution. Leading players are currently debating the future evolution of the user interface for test and measurement equipment. That being said, physical buttons and knobs have seen no significant developments; touch-screen technology, however, has enjoyed consistently abundant adoption and usage rates.

The complete touch-screen approach is expected to improve ease-of-use tremendously. It reduces the number of required keystrokes and menus, enabling efficient setups that are less susceptible to keystroke error. A number of leading test equipment manufacturers are focusing on 'mobile device' style interfaces. This phenomenon is the result of the entry of a new generation of engineers into the workforce, who would like to see the user interface concept of their smartphones or tablets adopted by the instrumentation that they use at work. Consumer electronics user interfaces are therefore attracting the interest of test equipment manufacturers.

However, providers of touch-screen test and measurement products face a marketing battle when it comes to convincing customers of the capabilities of these instruments in comparison with traditional 'knob and button' equipment. Frost & Sullivan's research suggests that addressing this challenge is critical for the acceptance of instruments that are based on mobile device user interfaces in the market.

Increased portability, usability, simplicity, compactness, and performance are among the features end users of test equipment expect, across all application areas. While no solution fits all applications, Frost & Sullivan firmly believes that companies who are able

to address these requirements will be in the best position to achieve growth and success in today's Test and Measurement market.

## Key Benchmarking Criteria for the New Product Innovation Award

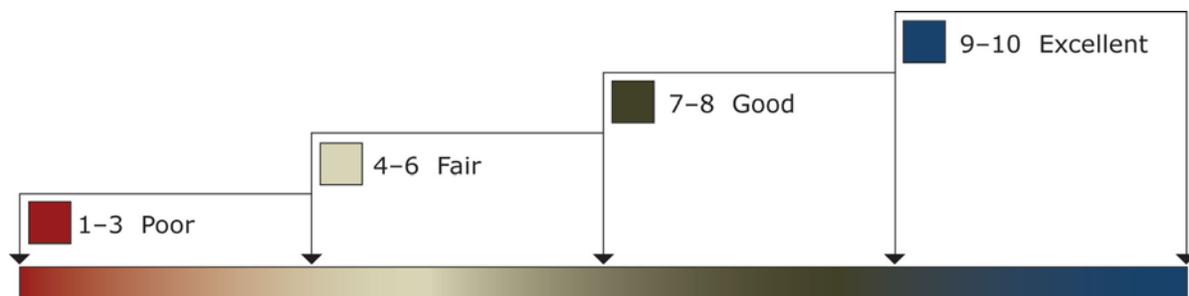
For the New Product Innovation Award, the following criteria were used to benchmark Oscium's performance against key competitors:

- **Innovative Element of the Product**
- **Leverage of Leading-Edge Technologies**
- **Value Added Features/Benefits**
- **Increased Customer ROI**
- **Customer Acquisition/Penetration Potential**

## Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies' performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company's performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 1.

**Chart 1: Performance-Based Ratings for Decision Support Matrix**



This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring that small

changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

**Chart 2: Frost & Sullivan’s 10-Step Process for Identifying Award Recipients**



**Best Practice Award Analysis for Oscium**

The Decision Support Matrix, shown in Chart 3, illustrates the relative importance of each criterion for the New Product Innovation Award and the ratings for each company under evaluation. To remain unbiased while also protecting the interests of the other organizations reviewed, we have chosen to refer to the other key players as Competitor 1 and Competitor 2.

**Chart 3: Decision Support Matrix for New Product Innovation Award**

<i>Measurement of 1–10 (1 = lowest; 10 = highest)</i>	Award Criteria					Weighted Rating
	Innovative Element of the Product	Leverage of Leading-Edge Technologies	Value Added Features/Benefits	Increased Customer ROI	Customer Acquisition/Penetration Potential	
<b>Relative Weight (%)</b>	<b>25%</b>	<b>20%</b>	<b>25%</b>	<b>15%</b>	<b>15%</b>	<b>100%</b>
Oscium	9	8	9	9	8	8.7
Competitor 1	8	9	8	8	9	8.4
Competitor 2	8	8	7	7	8	7.6

### **Criterion 1: Innovative Element of the Product**

Frost & Sullivan's research shows that Oscium's WiPry™ family of products is the first line of instruments introduced in the RF Test Equipment market for iOS devices. WiPry converts an Apple's iOS device (iPad, iPhone, or iPod touch) into a power meter or spectrum analyzer, or combines both into a single iOS device platform. This revolutionary family of products allows end users to make frequency and power measurements directly from an iOS device.

Since test and measurement equipment is predominantly fitted with knobs and buttons, Oscium's offering is making significant inroads on the user interface front, improving user experience by introducing an elegant solution that is not only more portable but also easier to use. Compared with several of its competitors whose focus is on test equipment's speed and performance, Oscium emphasizes the intuitiveness and ease-of-use for test equipment. WiPry's unique value proposition is its portability, its modularity, and its ability to leverage Apple's iOS device touch-screen platform.

The company has excelled in the low frequency RF Test Equipment market by providing customers with a viable alternative user experience that differs from that offered by current and traditional test equipment in the marketplace. This alternate experience is best demonstrated by Oscium's WiPry multi-tool portable test equipment concept, in which end users have the opportunity to transform their iPad or iPhone into the power meter or spectrum analyzer that they need.

### **Criterion 2: Leverage of Leading-Edge Technologies**

Oscium offers some of the smallest and most portable RF test instruments for low frequencies and power ranges (2.4–2.495 GHz for WiPry-Spectrum Analyzers and 100 MHz–2.7 GHz for WiPry-Power Meters).

The WiPry family of products excels by fulfilling industry demands for low frequencies, using the OpenGL interface over the iOS platform for real-time analysis of RF activity for spectrum analyzers. Moreover, for dynamic power meters, Oscium's WiPry has the capability to detect, generate, and record the real power of RF amplitude. WiPry improves and gives the user the capability to leverage the touch-screen technology found in iPads and iPhones by means of a 30-pin dock connector. It makes consolidated and direct measurements effectively, utilizing a mobile integrated solution and a user interface that traditional instruments cannot meet.

Oscium has formed key partnerships with companies, such as Cypress Semiconductor Corp, using a PsoC programmable system on chip to improve the ease of use and power consumption of its products.

With different technologies competing in the low frequency RF Test Equipment market, Oscium's solutions have excelled by offering low power consumption and dynamic communications interfaces with directly related accessories with the use of Apple's iOS operating system and its Software Development Kit.

### **Criterion 3: Value Added Features/Benefits**

WiPry-Spectrum, Wipry-Power, and WiPry-Combo address the needs of hobbyists, communication designers, wireless network specialists, and educational end users of portable RF test equipment for low frequencies.

In particular, WiPry-Combo has the capacity to shift to spectral approach in order to analyze the 2.4 GHz ISM band utilized in Wi-Fi, Bluetooth, and distant sensor instruments.

However, the unique value proposition found with Oscium's WiPry family of products is the complete redesign of the interface experience with test equipment. Oscium has made significant inroads creating a new category of products in the Low Frequency Portable RF Test Equipment market.

Oscium offers a superior product because it removes the load time requirement when the application is executed to make directed measurements. Among the additional benefits that customers experience upon adopting Oscium's product is the fact that the WiPry is modular. This factor gives the company an important competitive advantage over similar industry solutions, as it lowers operational costs in comparison with other products used. Users have the opportunity to download updates free of charge in the Apple store, thus enabling Oscium to distribute updates to its customers expeditiously.

### **Criterion 4: Increased Customer ROI**

The WiPry-Spectrum Analyzer is available for \$99.97, the WiPry-Dynamic Power for \$149.97, and the WiPry-Combo, which includes both instruments, is available for \$199.97. WiPry's list price is certainly attractive as entry-level RF test equipment for low frequencies.

Oscium has focused on ease-of-use while developing its products and it was the first to introduce an iOS-based test instrument to the Low Frequency Portable RF Test Equipment market. WiPry provides users with exactly what they require in terms of user experience. It offers users the opportunity to monitor detailed measurement data across several controls without a load time. In comparison with competing offerings, Oscium's WiPry offers end users the opportunity to monitor controls directly from the iOS device screen. Unlike traditional instruments for the same frequency targets, this unique function is a key differentiating factor for users, providing the opportunity to focus exclusively on the display, rather than attempting to find a knob or button, and rapidly change amplitude scales.

## Criterion 5: Customer Acquisition/Penetration Potential

Oscium is a relatively new participant in the RF Test Equipment market. However, Frost & Sullivan is convinced that its future is promising. Although there are several companies with USB-based instruments, Oscium has achieved strong brand recognition by offering the first RF test equipment for iOS devices. Frost & Sullivan believes that the company has the potential to influence the current product landscape for low frequency portable RF test equipment significantly. Oscium has begun to exploit areas in terms of user experience for test equipment that have not yet been exploited. These types of instruments have the potential for increased penetration in the market, mainly due to their price, portability, modularity, and ease of use.

## Conclusion

Oscium has facilitated significant developments in today's Low Frequency Portable RF Test Equipment market, pioneering solutions that improve the user-interface experience with such equipment. Oscium's WiPry family of products is a revolutionary line of instruments introduced in the RF Test Equipment market that enables end users to make frequency and power measurements directly from an iOS device. Based on Frost & Sullivan's independent analysis of the Global Low Frequency Portable RF Test Equipment market, Oscium is recognized with the 2012 New Product Innovation Award.

## About Frost & Sullivan

The Frost & Sullivan Best Practices team of industry experts presents awards to companies demonstrating best practices in a variety of regional and global markets. These Best Practices Awards recognize the superior planning and execution of product launches, strategic alliances, distribution strategies, technological innovations, customer service, and mergers and acquisitions. A host of other crucial marketing factors such as leadership, strategy, service, innovation, integration, and development are also considered as part of the award methodology.

The companies that are commended as Best Practices Award recipients are those with the diligence, perseverance, and dedication required to develop a successful business plan and excel in the increasingly competitive global marketplace. Frost & Sullivan leverages 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from over 40 offices on six continents.