

Wireless M2M Taking Hold in Many Industries for 2012

FreeWave Technologies said today that 2012 will be a banner year for wireless data radio communications across many industrial and geographical markets. As one of the early pioneers of 900 MHz wireless technology in 1993 (which now has expanded into additional multiple spectrums), FreeWave has seen the evolution of wireless machine-to-machine (M2M) communications grow and gain traction across both traditional and, more recently, newer growth markets, such as the Smart Grid. M2M communications are widely regarded as a strong growth opportunity not only by FreeWave, but by businesses that are recognizing that by wirelessly connecting machines, devices, sensors, equipment, etc. they can make their existing processes more productive and open entirely new ways of using data.

“In the past, myths about security concerns and overall reliability issues with wireless technology had to be hurdled, but today, it is clear that wireless is here to stay,” said Ashish Sharma, chief marketing officer of FreeWave Technologies. “Many diverse and dynamic markets, such as oil and gas, utilities in electric power and water and government/defense will continue to look for ways to streamline their operations and as a result there will be exciting, new innovations for addressing issues previously deemed cost-prohibitive, not technically feasible or lacking in sufficient reliability.”

These sentiments are echoed across the world because wireless increasingly is becoming the top solution for communications technology due to growing demand and innovation. In addition, people and companies will continue to have a large appetite for data and knowledge, and therefore will want more of it, faster. This idea, in conjunction with increasing security standards and lowering the power consumption necessary to effectively run wireless communication devices, will continue to be a key driver of demand and innovation as well. More sophisticated ways of doing things – such as asset tracking and machine-to-machine communications (at lower costs) – will continue to emerge in the wireless industry and particularly in three key industrial markets, FreeWave sees the following trends taking shape as well.

OIL AND GAS:

In 2012, there also will be a greater shift to hybrid network systems that utilize more than one wireless solution for the communications network. Traditionally, companies with large and geographically dispersed communications networks, such as those in the oil and gas industry, typically have selected one technology, one source, one vendor to collect, retrieve and report data to assess the health of their network. However, there is a new paradigm today in which organizations are breaking away from tradition and deploying multiple communication technologies to create a hybrid communications network that can better serve an organization's

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needs. A hybrid approach also has a positive impact on reducing an organization's investment, operating costs and more. Ultimately, a company will be able to use the least expensive modality until they run into a barrier where wireless technology will be able to better serve the application's requirements.

ELECTRIC POWER/SMART GRID:

Sharma says the key to any successful smart grid operation is reliable, secure communications. One outlook he says for 2012 is that utilities will rely on real-time assessments of both the overall health of the power grid and the vital assets and systems within the grid as well. As utilities continue to invest more resources in AMI deployments and distribution automation, reliable and secure data communications are going to continue to be a top focus because of the need to effectively and efficiently deliver information for demand response and condition-based monitoring applications. Key applications in distribution automation that FreeWave's wireless solutions address include AMI Backhaul Distribution Management (DMS); Capacitor Bank Control Monitoring; Fault Detection and Isolation; Volt/ VAR Optimization; Substation Automation (SSA) and Demand Response (DR). Additionally, wireless data communication solutions that have been tested and proven in markets, such as oil & gas and water/wastewater, will enable utilities with multiple functions (gas, electric and water/wastewater) to improve their total cost of ownership by implementing a cross-functional solution.

GOVERNMENT AND DEFENSE:

Wireless solutions have been essential for the government and defense markets, but industry standards are continuing to evolve in order to mitigate issues related to security and safety. Measures are being taken to increase the number of layers of security within a network as well as the sophistication of the security measures themselves, such as increased scrutiny on encryption methods and protocols. For certain applications like unmanned vehicles, robotics and soldier training, the size and weight of wireless data communication solutions also is a huge focus moving forward. A major value proposition for wireless solutions in the industry for 2012 is being able to provide a more compact, lighter weight solution without sacrificing security or performance.

"Our customers depend on wireless data communications for operational success and there are enormous societal impacts if critical infrastructures - like utilities, government/defense and oil and gas markets - fail," Sharma said. "We take pride in the dependability of our solutions, which further is emphasized by the most rigorous testing methods for every single radio that comes out of our world-class manufacturing facility in Boulder."

Visit the company's website at www.freewave.com [1].

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