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Ubidyne Promises Base Station Savings

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Ubidyne is looking to bring a new efficiency and cost savings to base stations by condensing traditional radio hardware into a compact, integrated system.

The company, which is based in Ulm, Germany, and has a U.S. office in Scottsdale, Ariz., is basing its strategy on its uB900 active antenna system. The unit integrates critical base station radio technology into an all-digital active antenna package that reduces both power waste and operating costs.

Ubidyne, founded in 2005 by the former CTO of 4G Networks at Siemens, claims it is offering the world's first pure digital radio system, based on its own type of application-specific integrated circuit (ASIC). The system eliminates the need for bulky coaxial feeder cables as well as remote electrical tilt assemblies and additional amplifiers on antenna towers and masts. "The technology significantly reduces energy consumption while improving radio performance, deployment flexibility, coverage and mobile network capacity," says Kent Heath, Ubidyne's vice president of marketing and business development.

According to Heath, the uB900 gives mobile operators substantial benefits in terms of performance, reduced footprint, energy efficiency and overall deployment costs. He also touts the technology's quality and reliability, as well the system's ability to allow operators to deploy fewer sites while maintaining existing quality and capacity levels. Heath notes that the underlying proprietary technology is compatible with 2G, 3G, 4G, LTE and other current and planned mobile standards operating between 400MHz to 3.8GHz.

Heath says Ubidyne will make it less expensive and more convenient for operators to build and upgrade base stations, thanks to the uB900's modest size, light weight and integrated design. "You don't, for instance, have to dig a deeper foundation to support more hardware," he says. The system also makes base stations significantly easier to manage, allowing operators to fine-tune their networks for coverage and capacity without ever visiting the site.

Heath says operators adopting Ubidyne's technology will see immediate and substantial cost reductions. "It will save operators about one-third of the total cost of network operations," he says. Operators will also be able to polish their green credentials by using a technology that consumes less power and isn't as physically or cosmetically intrusive as conventional base station technologies.

Ubidyne is already making major marketplace inroads, Heath says, having cut deals with "three top base station OEMs." The company has already trialed the technology with Vodafone.

Heath feels that Ubidyne's solution is unique and that the company isn't likely to face any near-term competition in the base station market, given the uB900's highly proprietary nature. "We pretty much have this market all to ourselves," he says.

Ubidyne's plans to launch commercial production in the second half of this year.

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