

# ANTENNA

## SYSTEMS & TECHNOLOGY

### **Ethertronics Fosters New Era of Slim Phones With the Integration of Its Leading-Edge Embedded Antennas**



Ethertronics, an internal (embedded) antenna technology provider for wireless devices, has announced that its Isolated Magnetic Dipole (IMD) antennas have been integrated into multiple Samsung 3G Ultra Edition handsets. The announcement follows recent news from Samsung that the launch of its Ultra Edition premium handsets significantly contributed to the company's third quarter sales.

Ethertronics' IMD antennas have been designed into Samsung's SGH-D900 and SGH-D830 handsets, which represent two-thirds of its 3G Ultra Edition premium handset lineup. Samsung recently reported that robust sales of its Ultra Edition slim handsets helped boost shipments to a record

30.7 million units in the third quarter.

As newer feature-rich slim phones are developed, it is critical that handset manufacturers consider how to best integrate increased functionality such as digital cameras and Bluetooth radios into a compact form factor without negatively impacting cellular antenna performance, said Laurent Desclos, VP of Business Operations and CTO of Ethertronics. Our IMD technology mitigates interference issues, while also satisfying both the handset manufacturer and carrier's performance specifications. The benefits of integrating our IMD technology-enabled antennas are easily seen in Samsung's successful new 3G Ultra Edition handsets, a compelling form factor which provides outstanding RF performance.

Ethertronics' patented IMD technology delivers on the key needs of today's wireless devices. It has been designed to confine the current flow on the antenna element and opti-

mize its isolation to deliver higher performance in a small form factor with minimal SAR emissions. With this design, multiple antennas for cellular, mobile TV reception, GPS, Bluetooth, WiFi and WiMAX are easily integrated with fewer constraints and greater function. This multiple antenna integration capability enables handset developers such as Samsung to design feature-rich devices to exacting specifications in a variety of slimmer, more compact form factors.

With Ethertronics' antenna integration, feature-packed handsets such as the Samsung SGH-D900 and SGH-D830 are able to perform a variety of applications via a slim form factor. Weighing 85 grams, and measuring in at 103.5 by 51 by 12.9 mm, the Samsung SGH-D900 GPRS slider phone includes a three-megapixel camera with flash and digital zoom and 60 MB of built-in memory, as well as the capability to exchange photos via Bluetooth, MMS and USB. The quad-band phone is both WAP- and Java-enabled, includes a video recorder and player, and several more advanced features integrated into a single device. The Samsung SGH-D830, which is 9.9 mm, is a tri-band, EDGE/GPRS wireless phone with several innovative features including a two-megapixel camera with digital zoom, video recorder and player. In the offline mode, the Samsung SGH-D830 enables users to continue to work on their phone. In addition, the phone's TV-Out option allows users to transmit files via an analog video signal to a PC or television.

As handset developers continue to develop novel form factors to approach the market, we believe that Ethertronics will play an expanding role, given our leading-edge antenna technology, said Desclos. We have developed something unique, where high performance can be achieved without compromising the industrial design.

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