

Symbol Announces Gen 2 Tags, Converter Program

The company is rolling out its first Gen 2 inlays, launching a line of asset tags and starting a certified converter program.

By Mary Catherine O'Connor

May 1, 2006—[Symbol Technologies](#) made a number of new product and program announcements today at [RFID Journal LIVE!](#) in Las Vegas. The manufacturer is introducing its first Gen 2 inlays, starting a line of asset tags and launching a certified converter program.

Three of the seven Gen 2 inlays the company is debuting use Symbol's dual dipole antenna design. One of the two dipoles in the tag can be optimized for operation in the near field—the magnetic energy field extending one wavelength from the interrogator's antenna—with the other optimized for far-field operation.

Another option is for users to have one dipole antenna tuned for optimal use in the United States, where the [Federal Communications Commission](#) (FCC) mandates that tags transmit between 902 and 928 MHz, and the other antenna optimized for Europe, where the [European Telecommunications Standards Institute](#) (ETSI) stipulates the 865.6-to-867.6 MHz band. The dual dipole inlays are available in three sizes: 2 by 4 inches, 3.5 by 3.5 inches and 4 by 4 inches.

In addition, Symbol is releasing four Gen 2 inlays with single dipole antennas optimized for far-field, reading at up to 25 feet from the interrogator antenna. The four inlays are distinguished from each other by size: 1 by 1 inch (designed for pharmaceutical bottles), 1 by 4 inches, 1 by 6 inches and 2 by 2 inches. The single dipole inlays are tuned to operate between 860 MHz and 960 MHz, enabling them to be readable in different regulatory environments.

The seven new models, part of Symbol's RFX6000 family of inlays, are now available. All seven inlays, however, must be converted into smart labels or adhesive tags by a Symbol-certified converter before use. Sample rolls of the inlays are available starting at \$250. The company will not provide prices for production quantities of the tags.

Symbol's inaugural asset tag is designed for use on metallic assets such as shipping containers, railcars and trucks. As with the inlays, this 6-by-6-inch metal-mount tag can be designed to operate in both U.S. and E.U. regulatory environments. Consisting of a Gen 2 passive UHF RFID chip, a dual dipole antenna and a rugged plastic casing, the tag can be read from a distance of 50 feet, using a handheld interrogator. It contains a metal backplane that serves as an extension of the antenna and prevents RF interference from any metal surfaces onto which the tag might be placed, according to Joe White, Symbol's vice president of product management and tag engineering. This reusable specialty tag can track assets in rough environments where the tagged item sustains heavy knocks and blows, and can store 96 bits of data. White says that approximately 2,000 of the tags are currently being used in customer pilot tests. The company has not released the price for the metal-mount tag.

This is the first product in what will become a line of asset tags Symbol plans to market. Others in development include a tag in a plastic housing, designed for use on reusable totes for sacks, such as those used by post offices to carry letters. Future asset tags will likely also contain LED or LCD indicators, or be integrated with temperature sensors and used to track goods in the perishable-food supply chain, according to Alan McNab, Symbol's senior director of product marketing.

Symbol has launched its Certified Label Converter program to provide a standardized program through which a label converter can seek certification to convert Symbol inlays into labels for end users. For a converter to get certified, Symbol performs audits on the converter's methods and tag-testing processes, making sure it performs these steps accurately and at a high level of quality.

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