



Features

Unique inlay design obtains excellent read range regardless of surface – metal, plastic, even wood.
Lowest profile in its class makes label unobtrusive
Digital printing process provides for greater print capability with detailed logos or special designs
Excellent read range in European frequency
Compatible with RFID Tracking Software

Product Print Options

Barcode . Data Matrix . QR Code . RFID . Serial Number . Text

Product Functionality

Abrasion Resistance . Chemical Resistance . Heat Resistance

Popular Applications

Audio / Visual . Government . Inventory . Construction / Tool Tracking . Hospitals . IT Assets . Manufacturing . Schools

Category

Medical - RFID . Asset Tracking - RFID . RFID Tags

The closest thing you will find to a one-size-fits-all” RFID solution! The European Universal RFID Asset Tag is a surface-independent tag that uses a unique inlay design and passive RFID technology to obtain excellent read ranges regardless of the surface – metal, plastic, even wood allowing you to only use only one RFID tag for your asset tracking application.

The European Universal RFID Asset Tag features an inlay design that offers the lowest profile of any tags in its class – solving a common issue many customers have with other metal mount RFID tags where a thick standoff creates an obtrusive nuisance for the user.

This unique inlay adheres to a subsurface printed label constructed of durable, yet flexible polyester. This process protects the copy, logo and/or barcode against moderate solvents and caustics/acids while our four-color processing capabilities allow you to promote your company with a label that shows off your company name or logo. Our digital printing process ensures even the most

detailed logos will look crisp and clean.

Potential Applications For EU Universal RFID Asset Tags

Asset Tracking – the barcode and human readable ID number on the European Universal RFID Asset Tag can be used to track information about the metal asset the RFID tag is adhered to, i.e., laptops, furniture, containers, equipment and more.

Work-in-Process – the barcode and/or identification number on the European Universal RFID Asset Tag can identify a “batch” OR “lot” of product or just simply identify each product as it travels through the production process.

To learn more, check out our case study, [Universal Healthcare](#).

Specifications Data

Material	.05mm thick polyester label adhered to proprietary inlay wrapped around 1.59mm closed cell foam. Total product thickness is 2.16mm.
Serialization	Bar code and humanreadable equivalent is produced using the latest highresolution digital technology available, which provides excellent clarity and easy scanning. Code 39 is the standard symbology. The bar code and human readable can be programmed into the RFID inlay as long as the information is in decimal or hexadecimal format. The programmed information can be locked, which prevents the RFID inlay from being rewritten. Metalcraft can encode up to 24 characters into the RFID inlay. If desired, Metalcraft can encode information that differs from the bar code and human readable.
Label Copy	The label copy may include block type, stylized type, logos or other designs. All copy, block type, stylized type, logos, designs, and bar code are subsurface printed. This unique process provides excellent resistance to solvents, caustics, acids and moderate abrasion.
Colors	Standard colors include black, red, yellow, green and blue. Due to contrast needed for the bar code scanner, all bar codes are black.
Standard Adhesive	High performance adhesive
Frequency Range	865 - 868 MHZ
Sizes	3.125" x 1.375"
Packaging	Produced and shipped in roll form.

Chemical Testing

Tags constantly soaked in the solutions indicated. In all cases, after 3 weeks soaking in these chemicals, all the tags and labels responded properly when interrogated with a handheld RFID reader, and all the bar codes except those soaked in acetone were readable with a standard bar code reader.

Chemical Test Data

Length of Immersion	Water	Glass Cleaner	Bathroom Cleaner pH 10.0	Isop. alcohol 99%	Acetone 100%	NaOH pH 12.0	HNO3 pH 12.0	HCl pH 1.0	Brake Fluid
2 hours	no effect	no effect	no effect	no effect	no effect	no effect	no effect	no effect	no effect
24 hours	no effect	no effect	no effect	no effect	When pulled, tags came apart	no effect	no effect	no effect	no effect
1 week	no effect	no effect	no effect	P.S. adhesive softened	When pulled, tags came apart	When pulled, tags came apart	no effect	no effect	no effect
3 weeks	no effect	no effect	no effect	When pulled, tags came apart	When pulled, tags came apart	When pulled, tags came apart	no effect	no effect	no effect

Destructive Testing

Destructive Test Data

Temperature Testing

Heat Testing: Product withstood temperatures up to 115°C (240°F) for short term (10 minute) periods. The will withstand temperatures up to 71°C (160°F) for extended periods (tested for six hours with no degradation). The tests demonstrated that when the transponder was not readable at temperatures above 85°C (185°F), but resumed function when temperatures were once again reduced below 85°C (185°F). Cold Testing: Tags were tested outdoors at -18°C (0°F) and were readable, but read distance was reduced to half of the read distance observed at 15°C (60°F).

Temperature Test Data

Read Range Testing

Anechoic Chamber Theoretic Read Distance (In Meters)

Read Range Test Data

Metal	Plastic	Cardboard	Wood	Glass
8.5 M	3.2 M	2.7 M	4.4 M	8.8 M

Barcode Readability Testing

Barcode Readability Test Data

Abrasion Testing

Abrasion Test Data

Label Adhesion Testing

Label Adhesion Test Data

Pull Testing

Pull Test Data

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