

European Universal RFID Asset 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 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 bar code 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. Metalcraft’s digital printing process ensures even the most detailed logos will look

Key Product Features

- Unique inlay design obtains excellent read range regardless of surface – metal, plastic, even wood.
- Lowest profile in its class makes label unobtrusive
- Subsurface printing on durable polyester or polypropylene protects printed copy against moderate solvents and caustics/acids
- Digital printing process provides for greater print capability with detailed logos or special designs
- Choice of up to four standard colors or spot color and four color process
- Excellent read range in European frequency

Not sure what product you need?

Call our trained Experts

641-423-9460

UNIVERSAL
RFID
BY **METAL CRAFT**

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Mason City, IA 50401
www.universalrfid.com



*Read range differs by environment and reader type

European Universal RFID Asset Tag Specifications

Construction: .05mm thick polyester label adhered to proprietary inlay wrapped around 1.59mm closed cell foam. Total product thickness is 2.16mm.

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.



Serialization: Bar code and human-readable equivalent is produced using the latest high-resolution 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.

Frequency:

Custom designed UHF inlay uses Alien Higgs 3 chip optimized for use at 865 - 868 MHZ.

Standard Sizes:
79mm x 35mm

Standard Adhesive: .05 mm thick low surface energy, pressure-sensitive adhesive (MC71FL). Provides excellent adhesion to uneven surfaces and slightly oily surfaces.

Shipment: 20 work days

To Order: Call **641-423-9460** and ask for an ID Specialist

Test Results

These tests were conducted for a limited period of time in strict laboratory conditions. In order to achieve maximum satisfaction we highly recommend that any customer considering use of this product test the labels in the environment in which they will be used.

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 he read distance observed at 15°C (60°F).

Chemical Soak Test: Tags constantly soaked in the solutions indicated.

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	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.
24 Hours	N.E.	N.E.	N.E.	N.E.	When pulled, tags came apart	N.E.	N.E.	N.E.	N.E.
1 Week	N.E.	N.E.	N.E.	P.S. Adhesive Softened	When pulled, tags came apart	When pulled, tags came apart	N.E.	N.E.	N.E.
3 Weeks	N.E.	N.E.	N.E.	When pulled, tags came apart	When pulled, tags came apart	When pulled, tags came apart	N.E.	N.E.	N.E.

N.E. = No Effect

* = 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.

Anechoic Chamber Theoretic Read Distance (In Meters)

METAL	PLASTIC	CARDBOARD	WOOD	GLASS
8.5 M	3.2 M	2.7 M	4.4 M	8.8 M