

# EU Universal Mini RFID Asset Tag



All the benefits of our European Universal tag in a smaller size!

With a smaller footprint and lower profile than the original European Universal RFID Asset Tag, the European Universal Mini easily fits in smaller places and on assets where other tags may be too large.

Developed using the same premise as our original, the EU Mini utilizes a patented inlay design and passive RFID technology to obtain incredible read ranges on a variety of different materials in the European frequency band (ETSI Band) - metal, plastic, even wood. Also customer programming can match the printed barcode information for two tracking technologies.

## Features

Smaller footprint and lower profile while still achieving excellent read range sets this product apart from others  
Patented inlay design obtains excellent read ranges regardless of surface—metal, plastic, even wood  
Subsurface printing on durable polyester protects printed copy against moderate solvents and caustics/acids  
Excellent read range in European frequency

## Product Print Options

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

## Product Functionality

Abrasion Resistance . Chemical Resistance . Heat Resistance

## Popular Applications

Government . Inventory . Museum . Restoration . Transportation / Logistics . Utilities . Warehouse / Distribution Centers . Wineries / Breweries . Construction / Tool Tracking . Hospitals . IT Assets . Manufacturing . Schools

## Category

On Metal RFID . RFID Tags . Universal RFID

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## Specifications Data

<b>Material</b>	<b>Inlay wrapped around .79mm closed cell foam.</b>
Serialization	Bar code and human-readable equivalent are produced using the latest high-resolution digital technology available, which provides excellent clarity and easy scanning. Code 39 is the standard symbology with a range of 2.7 to 9.4 CPI (characters per inch). Optional linear and 2D symbologies available.
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.
Colors	Choose from our standard colors (black, blue, red, green, dark blue, orange, purple or yellow). The use of one or two colors is standard. Additional color options available. Custom colors also available. Metalcraft color samples available upon request.
Standard Adhesive	High performance adhesive
Frequency Range	865 - 868 MHZ
Sizes	76mm x 19mm
Packaging	Produced and shipped in roll form.
Shipment	16 business days

## Chemical Testing

Chemical soak test - The E Universal Mini tags were attached to a sheet of glass submerged in various chemicals for a 3 week period. Observations were made at the following intervals: 2 hours, 24 hours, 1 week, 2 weeks, and 3 weeks. A Motorola handheld RFID reader as well as a handheld barcode reader were used to test the samples.

### Chemical Test Data

Length of immersion	Water	Glass cleaner	Bathroom cleaner	Isopropyl alcohol 99%	Acetone	NaOH pH 1.0	HCl pH 1.0	Brake fluid
2 hours	no effect	no effect	no effect	no effect	no effect	no effect	no effect	no effect
24 hours	no effect	no effect	no effect	no effect	no effect	no effect	no effect	no effect
1 weeks	no effect	no effect	RFID tag read with difficulty (significantly lower hits/second)	no read	Tag structure weakened	tag detached	no effect	no effect
2 weeks	no effect	RFID tag read with difficulty (significantly lower hits/second)	RFID tag read with difficulty (significantly lower hits/second)	no read	no read	tag detached	no read	no effect
3 weeks	tag peeled easily	tag peeled easily	no read; tag ppeled easily	no read; tag peeled easily	no read	tag detachedq	no read; tag peeled easily	no effect

## Temperature Testing

High-temperature resistance test - These tags were attached to a sheet of glass at raised temperatures for 10 minutes. Tags were then removed from the oven and tested for readability immediately. Low-temperature resistance test - The E Universal Mini tags were attached to a sheet of glass at low temperatures outdoors. Tags were then checked for readability with a Motorola handheld RFID reader. Tags survived and were readable for 19 hours in winter conditions with temperatures between -29° (-20°F) to -32°C (-26°F) with no signs of failure.

### Temperature Test Data

Temperature	RFID read test (immediately of of oven)	Appearance of tags
52°C (125°F)	Reads well	No change
57°C (135°F)	Reads well	No change
63°C (145°F)	Reads well	No change
73°C (163°F)	Reads well	Slight curling at edge
85°C (185°F)	Reads well	Slight curling at edge
96°C (205°F)	Reads well	Slight curling at edge
107°C (225°F)	Reads well	Severe curling at edge - tag discolored
121°C (250°F)	Reads well	Tag destroyed

## Read Range Testing

### Read Range Test Data

#### E Universal Mini Read Range Results (ETSI Band)

Sample	Metal	Plastic	Wood
Average	2.8 M	2 M	1.6 M