



The closest thing you will find to a "one-size-fits-all" RFID solution! The Universal RFID 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.

This revolutionary product line features surface-independent tags with a patented inlay designed to obtain excellent read range regardless of the surface - metal, plastic, even wood. Custom programming matches the printed bar code information allowing you the option of using both tracking technologies.

## Features

Patented inlay design obtains excellent read range regard less of surface – metal, plastic, even wood

Lowest profile in its class makes label unobtrusive

Subsurface printing on durable polyester protects printed copy against moderate solvents and caustics/acids

Digital printing process provides for greater print capability with detailed logos or special designs

## 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 . Restoration . Theater . Hospitals

## Category

On Metal RFID . RFID Tags . Universal RFID



## Specifications Data

<b>Material</b>	<b>.002" thick polyester label adhered to proprietary inlay wrapped around 1/16" closed cell foam. Total product thickness is approximately .085"</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 5.4 CPI (characters per inch). Optional symbology is Code 128.
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 moderate resistance to solvents, caustics, acids and abrasion.
Colors	Standard colors include black, red, yellow, green, dark blue, orange, purple and blue. Due to contrast needed for the bar code scanner, all bar codes are black.
Standard Adhesive	Pressure-sensitive acrylic adhesive
Frequency Range	Custom designed UHF inlay optimized for use at 915 MHz. ( UHF, Class I Gen 2 )
Sizes	2.875" x 1.375"
Packaging	Produced and shipped in roll form.
Shipment	14 business days

## Chemical Testing

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	Bathroom cleaner pH 10.0	Isop. alcohol 99%	Acetone 100%	NaOH 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
24 hours	no effect	no effect	no effect	no effect	When pulled, tags came apart	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
3 weeks	no effect	no effect	no effect	When pulled, tag came apart	When pulled, tags came apart	When pulled, tags came apart	no effect	no effect



## Temperature Testing

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

## Read Range Testing

In many cases the tags read intermittently for longer distances than those indicated, however, the results reported below were for continuously responding reads.

### Read Range Test Data

Device used	Test results (all at 30 dBm)			
	Metal	Plastic	Cardboard	Wood
Handheld convergence CS-101				
Universal RFID asset tag	27.5 feet	20 feet	15 feet	15 feet



VULCAN RFID

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