Features
Specifically designed microchip to identify temperature
Can be affixed or embedded into most materials
Passive UHF

Product Print Options
Barcode . Data Matrix . QR Code . RFID . Serial Number . Text

Category
Asset Tracking - RFID . RFID Sensors

The ReadySense Passive RFID Temperature Sensor Tags are much smaller, thinner, and more flexible than battery-powered sensors, and they are more cost-efficient than active wireless sensing tags. With the ability to access and collect data, these RFID labels enable users to consistently monitor temperatures and provide critical information to help make informed decisions.

Specifications Data

RFID temperature sensor tag product information

Material	Polyester
Serialization	Barcode and human-readable equivalent is digitally printed – providing 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. Although this product is primarily marketed as a bar code product, we can produce it with human-readable numbers only or unserialized.
Label Copy	The label copy may include block type, stylized type, logos or other designs
Colors	Standard colors include black, red, yellow, green or blue. Custom spot colors are also available at no additional charge. Due to contrast needed for the bar code scanner, all bar codes are black.
Standard Adhesive	High performance adhesive
Sizes	4.1875" x 1.125"
Packaging	Shipped on convenient rolls with scrap matrix removed for ease of removal. Cartons are clearly marked to indicate serial numbers of labels.

Chemical Testing

The ReadySense temperature tags were attached to a sheet of glass submerged in various chemicals. Observations were made at the following intervals: 2 hours, 24 hours, 48 hours. 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 Cleanerq	Isopropyl Alcohol 99%	Acetone	NaOH pH 12.0	HNO3 pH 1.0	HCl pH 1.0	Brake Fluid
24 hours	no effect	no effect	no effect	no effect	Tag delaminated, Tag nor ead	no effect	no effect	no effect	no effect

Destructive Testing

Destructive Test Data

2019 Metalcraft, Inc.
3360 9th St SW Mason City, IA 50401
www.idplate.com |
www.universalrfid.com
Ph: 641-423-9460

Temperature Testing

High-temperature resistance test: These tags were attached to a sheet of glass at raised temperatures for 15 minutes. Tags were then removed from the oven and tested for readability immediately. Low-temperature resistance test - The tags were attached to a sheet of glass and exposed to -40°F for 24 hours. Tags were then checked for readability with a handheld RFID reader. All samples were readable while at temperature just prior to removal from the freezer. No tag construction defects were observed and the adhesive still had a strong bond while in the freezer.

Temperature Test Data

Temperature	RFID read test (after sample cooled to room temp.)	Appearance of tags
200°F	Reads well	No change
300°F	Reads well	No change
400°F	Reads well	Tag distorted
500°F	Reads well	Tag destroyed

Read Range Testing

Read Range Test Data

		ETSI UHF Band (865-868 MHz)				
Free Air	Cardboard	Wood	Plastic	Glass	Metal (requires 0.0625" thick foam in tag construction)
6.10	7.18	9.10	10.54	15.42	2.40

		FCC UHF Band (902-928 MHz)				
Free Air	Cardboard	Wood	Plastic	Glass	Metal (requires 0.0625" thick foam in tag construction)
5.54	6.95	7.54	10.71	7.43	3.62

Barcode Readibility Testing

Barcode Readability Test Data

2019 Metalcraft, Inc.
3360 9th St SW Mason City, IA 50401
www.idplate.com |
www.universalrfid.com
Ph: 641-423-9460

Abrasion Testing

Abrasion Test Data

Label Adhesion Testing

Label Adhesion Test Data

Pull Testing

Pull Test Data