



UHF label with adhesive backing and safe stapling zones, ensuring secure attachment without damaging the inlay—perfect for hard-to-adhere surfaces.

### PHYSICAL SPECIFICATION

#### Face Material

Printable white PET, resin ribbon is recommended\*

#### Label Size

101.6 x 50.8 x 0.23 mm | 3.07" x 0.7" x 0.009"

#### Adhesive

High performance acrylic adhesive provides high bond to most surfaces.

#### Delivery Format

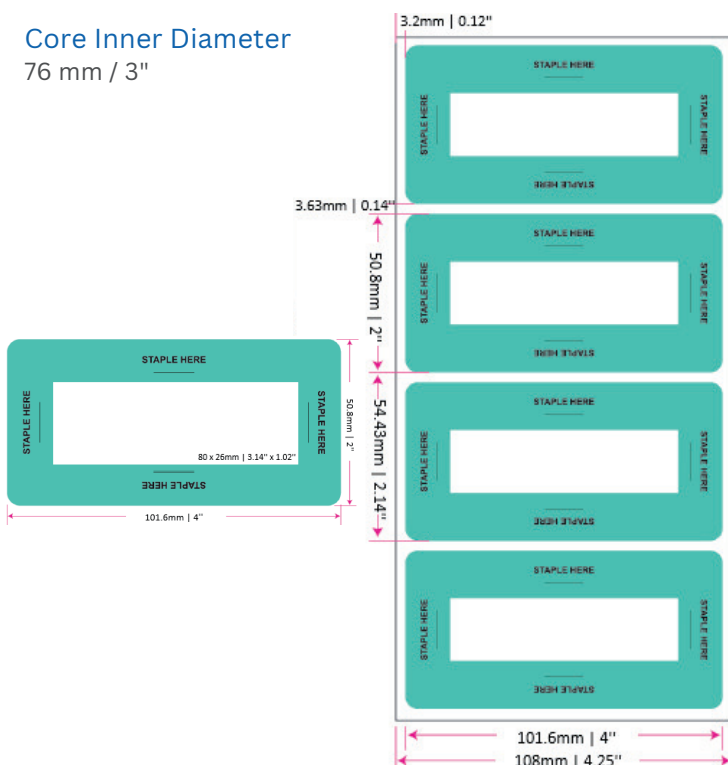
1000 pcs of good label on reel (Bad labels marked with '●' printing)

#### Label Pitch

54.43 mm | 2.14"

#### Core Inner Diameter

76 mm / 3"



### RF SPECIFICATION

#### Air interface protocol

ISO 18000-6C and EPC Global Gen2v2 compliant | Rain RFID

#### Operational frequency

Global: 865-928 MHz

#### IC

Impinj M830

#### Memory configuration

EPC 128bit; TID 96bit

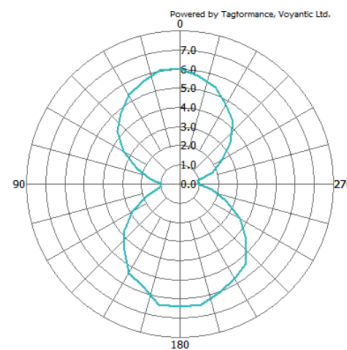
#### Applicable Surface Materials

Non-Metallic Surfaces

#### Read range (2W ERP)\*\*

	Meter	Feet
On Wood	6	19.6
On Cardboard	16	52.4

### RADIATION PATTERN



### PERSONALISATION OPTIONS

#### Pre-encoding

- Customer specific encoding of EPC memory

#### Customised Printing

- Customer specific artwork including logo & text, numbers, barcodes in black.
- Colour artwork imprint + transparent over-lamination

### ORDER INFORMATION

#### Part Number

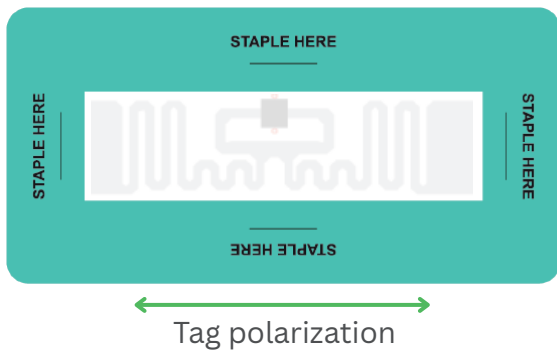
- RF.RLP.42.M830

#### Packaging

- 1000 pcs per box;
- 4 boxes per carton

\* For ribbon recommendation please contact [iotorders@sivagroup.co](mailto:iotorders@sivagroup.co)  
 \*\* The indicated read range values are measured in our laboratory testing environment, where antennas with optimum directivity are used with maximum allowed operating power. Different surface materials and environments may exhibit different results.

## PRODUCT INSTALLATION



### 1. Surface Preparation

- Ensure the surface is clean, dry, and free of dust, grease, or debris. For best results, wipe the surface with a dry cloth or alcohol-based cleaning solution and allow to dry completely.

### 2. Label Application (Stick)

- Gently peel the RFID label from the release liner without touching the backside of the label and IC location. Stick the label firmly to the desired surface. Adhesive of the label will provide best adhesion in 24 hours after the application. Bond strength can be improved with firm application pressure.

### 3. Staple for Extra Security (Staple)

- Using a manual or pneumatic stapler, staple through the designated "staple zones" on the label (marked). Ensure that staples do not puncture the RFID inlay (antenna or chip area). Only staple in areas outside the chip zone. Use corrosion-resistant staples (e.g., stainless steel) if exposure to moisture or chemicals is expected.

- Minimum bending diameter is defined to be 50mm. Do not bend the label below the limit.

## PRINTER COMPATABILITY

Compatible for printing and encoding using 4" & 6" wide industrial grade thermal transfer UHF printers.

Sensor type: Gap

As tested on Zebra ZT400 series, SATO CL4 NX series  
Printronix T6000 series

For setup instructions and printer configurations contact  
[iotsales@sivagroup.co](mailto:iotsales@sivagroup.co)

## ENVIRONMENTAL RESISTANCE

### Operating Temperature

-35°C to +85°C | -31°F to +185°F

### Installation Temperature

+10°C to +38°C | 50°F to +100.4°F

### Washing resistance

Tolerates industrial washing processes. Tested according to IPX9K with water at 60° angle, 80-100bar, and 80°C. Water flow rate 14-16l/min.

### IP Classification

IP68, tested 5 hours in 1m deep water

### Chemical resistance

No physical or performance changes in:  
- 168h Salt water (salinity 10%) exposure  
- 168h Motor oil exposure  
- 168h Sulfuric acid (10%, pH 2) exposure  
- 24h NaOH (10%, pH 13) exposure  
- 20min Acetone exposure

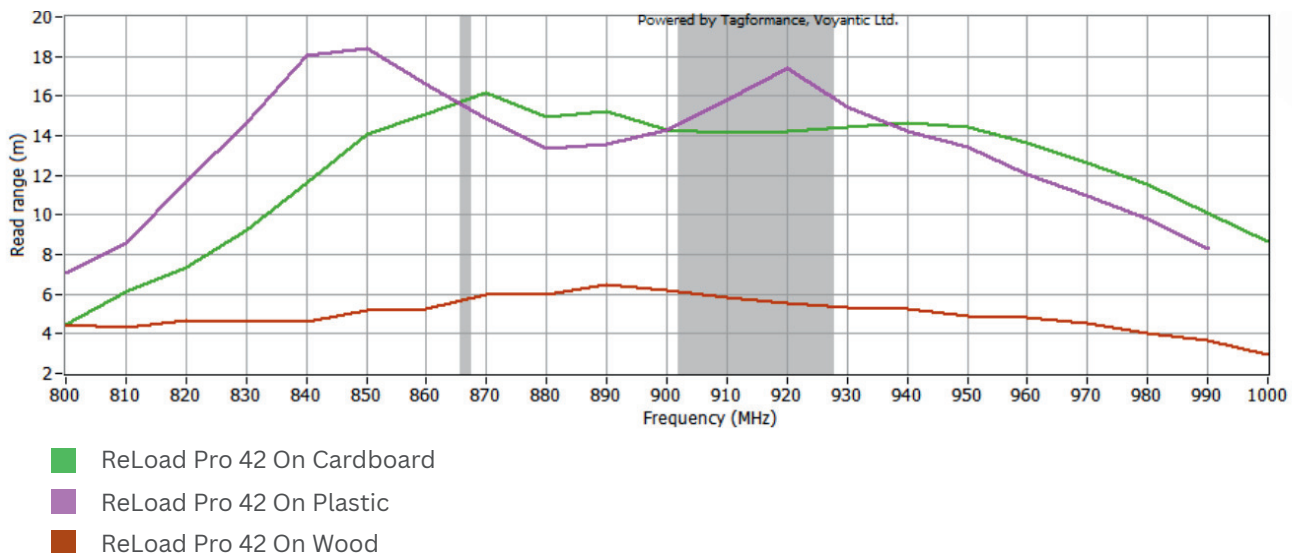
### Storage condition

1 year in +20°C / 50% RH (shelf life for adhesive)

### Expected Lifetime

Years in normal operating conditions

# READ RANGE GRAPH



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