

Avery Dennison  
Smartrac  
Quick Guide

September 2021

# RFID Labels for Pharmaceutical and Healthcare



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## Why RFID?

### Inventory accuracy

- Faster stock checks.
- Eliminates manual paperwork.
- Easy to identify near expiration medication.
- Reduces processing time.

### Reduced medical errors

- Eliminates human error.
  - Ensures all medication is correct and safe to use.
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## Why Avery Dennison?

### Broadest product range for any RFID challenge

- Global manufacturing footprint with one of the largest product ranges.
- Customized inlay and label products.
- Sustainable paper-based SmartFace®.

### Most reliable and durable products ensuring consistent quality and performance

- Proprietary chip strap attach for most durable RFID tags (chip protection through life cycle).
- 100% quality control ensures 99%+ functioning tags on roll to achieve maximum ROI.
- Minimal number of malfunctioning tags even after conversion.
- Less machine down time and wastage (label converting and application).

### Valued services that help grow your business














- Low MOQs (from 1 roll).
- Free sampling service.
- Shipping of stock items within 24 hours.
- Fast response from local RFID technology and sales team.
- Quick product qualification and POC support.

### Global network to expand your knowledge and capability




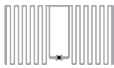
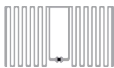








- New business opportunities from dedicated Business Development Managers and SMEs.
- RFID training academies and workshops at our I.Lab centers.
- Connect with local and/or global commercial partners.



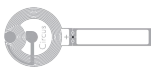



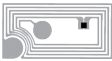


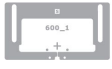


## Our RFID product recommendations

Product Name	Design (not to scale)	Antenna Dimensions	Chip	EPC and User Memory	TID Memory	Delivery Format	Applications
Accessory		30 x 15 mm 1.20 x 0.60 in	Impinj Monza R6	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Fashion Jewelry and Sunglasses Children Accessories Pharmaceutical and Healthcare
Accessory		30 x 15 mm 1.20 x 0.0 in	Impinj Monza R6-P	128-bit / 96-bit and 32-bit / 64-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Fashion Jewelry and Sunglasses Children Accessories Pharmaceutical and Healthcare
AD-183		Ø 26 mm 1.205 in	NXP UCODE 9	128-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Label / sticker	Home Essentials Personal Care Products Asset Tracking
AD-190		22 x 12.5 mm / 0.86 x 0.49 in	NXP UCODE 8	128-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Fashion Jewelry and Sunglasses Pharmaceutical and Healthcare Personal Care Products
AD-226		95 x 8 mm 3.74 x 0.32 in	NXP G2iM	256-bit and 512-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Supply Chain Management Inventory Asset Tracking
AD-229		95 x 8.15 mm 3.74 x 0.32 in	Impinj Monza R6	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Returnable Transport Units (RTUs) Supply Chain Management Brand Protection
AD-229		95 x 8.15 mm 3.74 x 0.32 in	Impinj Monza R6-P	128-bits and 64-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Returnable Transport Units (RTUs) Supply Chain Management Brand Protection
AD-237		70 x 15 mm 2.76 x 0.57 in	Impinj Monza R6	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Brand Protection Supply Chain Management Home Essentials
AD-237		70 x 15 mm 2.76 x 0.57 in	Impinj Monza R6-P	128-bits and 64-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Brand Protection Supply Chain Management Home Essentials
AD-238		70 x 15 mm 2.76 x 0.57 in	NXP UCODE 8	128-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Brand Protection Supply Chain Management Home Essentials
AD-301		30 x 15 mm 1.20 x 0.60 in	Impinj Monza R6	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Brand Protection Fashion Jewelry and Sunglasses Pharmaceutical and Healthcare
AD-321 FCC		41 x 16 mm 1.63 x 0.63 in	Impinj Monza R6	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Supply Chain Management Home Essentials Inventory and Logistics
AD-321 FCC		41 x 16 mm 1.63 x 0.63 in	Impinj Monza R6-P	128 bits / 64 bits	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Supply Chain Management Home Essentials Inventory and Logistics

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Product Name	Design (not to scale)	Antenna Dimensions	Chip	EPC and User Memory	TID Memory	Delivery Format	Applications
<b>AD-456</b>		64 x 6 mm 2.52 x 0.24 in	NXP UCODE 8	128-bit and n/a	96-bit / 48-bit unique serial number	Label / sticker	On-Metal Asset Tracking Brand Protection Food Item-Level Retail
<b>AD-810</b>		Ø 16 mm 0.63 in	Impinj Monza R6	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Asset tracking Pharmaceutical and Healthcare
<b>AD-850</b>		Ø 10 mm 0.4 in	Impinj Monza 4QT	128-bit and 512-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Asset tracking Pharmaceutical and Healthcare
<b>Bling</b>		22 x 12 mm 0.9 x 0.5 in	Impinj Monza R6	96-bit and n/a	N/A	Dry inlay Wet inlay Label / sticker	Fashion Jewelry and Sunglasses Pharmaceutical and Healthcare Personal Care Products
<b>Bling</b>		22 x 12 mm 0.9 x 0.5 in	Impinj Monza R6-P	128-bit and 32-bit	N/A	Dry inlay Wet inlay Label / sticker	Fashion Jewelry and Sunglasses Pharmaceutical and Healthcare Personal Care Products
<b>Bullseye™</b>		Ø 33 mm 1.30 in	NXP ICODE SLIX2	2500-bit	N/A	Label / sticker	Authentication, Warranty, Care Integration into Label Packaging
<b>Bullseye™ On Metal</b>		Ø 35 mm 1.38 in	NXP NTAG213	144 bytes	N/A	Wet inlay	Authentication, Warranty, Care Integration into Label Packaging
<b>Circus™</b>		Ø 18 mm 0.71 in	NXP ICODE SLIX 2	2500-bit	N/A	Wet inlay	Authentication, Warranty, Care Integration into Label Packaging
<b>Circus™ ILT-M</b>		Ø 22 mm 0.87 in	NXP ILT-M	240 bit EPC and 512 bit	N/A	Wet inlay	Authentication, Warranty, Care Integration into Label Packaging
<b>Circus™ NFC</b>		Ø 20 mm 0.79 in	NXP NTAG210 Micro	144 bytes	N/A	Wet inlay	Authentication, Warranty, Care Integration into Label Packaging
<b>Circus™ On Metal</b>		Ø 20 mm 0.79 in	NXP NTAG213	144 bytes	N/A	Wet inlay	Authentication, Warranty, Care Integration into Label Packaging
<b>Circus™ Pro</b>		Ø 20 mm 0.79 in	NXP NTAG424 DNA	416 bytes	N/A	Wet inlay	Authentication, Warranty, Care Integration into Label Packaging
<b>Circus™ Pro</b>		Ø 20 mm 0.79 in	EM4332	208 bytes	N/A	Wet inlay	Authentication, Warranty, Care Integration into Label Packaging Consumer Experience

## Our RFID product recommendations

Product Name	Design (not to scale)	Antenna Dimensions	Chip	EPC and User Memory	TID Memory	Delivery Format	Applications
<b>Circus™ Tamper Loop</b>		20 x 50 mm 0.79 x 2.0 in	NXP NTAG213 TT	144 bytes	N/A	Wet inlay Label / sticker	Authentication, Warranty, Care Integration into Label Packaging
<b>Circus™ Tamper Loop Pro</b>		20 x 50 mm 0.79 x 2.0 in	Silicon Craft SIC43NT	144 bytes	N/A	Wet inlay Label / sticker	Authentication, Warranty, Care Integration into Label Packaging
<b>Fly</b>		12 x 12 mm 0.5 x 0.5 in	NXP UCODE 7XM	448-bit and 2048-bit	N/A	Dry inlay Wet inlay Label / sticker	Aerospace Pharmaceutical and Healthcare
<b>Grille</b>		22 x 22 mm 0.90 x 0.90 in	NXP UCODE 7XM	448-bit and 2048-bit	N/A	Dry inlay Wet inlay Label / sticker	Aerospace Pharmaceutical and Healthcare
<b>Microtrack</b>		20 x 10 mm 0.79 x 0.39 in	NXP ICODE SLIX HC	240 bit EPC and 512 bit	N/A	Dry inlay Wet inlay	Authentication, Warranty, Care Integration into Label Packaging
<b>Midas Flagtag</b>		31.41 x 18 mm 1.24 x 0.71 in	Impinj Monza R6	96-bit and n/a	N/A	Dry inlay Wet inlay	On-Metal Asset Tracking Metal / Liquids Supply Chain Management
<b>Midas Flagtag</b>		31.41 x 18 mm 1.24 x 0.71 in	Impinj Monza R6-P	128-bit and 32-bit	N/A	Wet inlay	On-Metal Asset Tracking Metal / Liquids Supply Chain Management
<b>Minidose</b>		12 x 22 mm 0.47 x 0.87 in	NXP UCODE 8	128-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Fashion Jewelry and Sunglasses Package Tracking Pharmaceutical and Healthcare
<b>Minidose</b>		12 x 22 mm 0.47 x 0.87 in	NXP UCODE 9	96-bit	96-bit / 48-bit unique serial number	Dry inlay Dry+ inlay Wet+ inlay	Pharma and Healthcare Package Tracking Fashion Jewelry and Sunglasses
<b>Minitrack</b>		14 x 31 mm 0.55 x 1.22 in	NXP ICODE SLIX 2	2500-bit	N/A	Dry inlay Wet inlay	Authentication, Warranty, Care Integration into Label Packaging

## Contact information

[rfid.averydennison.com/contact](https://rfid.averydennison.com/contact)

North America: +1-866-903-7343 (toll free US)

International: +1-678-617-2359

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**Warranty:** Please refer to Avery Dennison standard terms and conditions: [rfid.averydennison.com/termsandconditions](https://rfid.averydennison.com/termsandconditions)

**Care and handling:** RFID inlays are sensitive to ESD. Observe standard industry practices relating to electronics / RFID to keep environmental impact and static charge to a minimum.

**Applications:** This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify, change, supplement or discontinue product offerings at any time without notice. The information contained herein is believed to be reliable but Avery Dennison makes no representation concerning the accuracy or correctness of the data.

