

Avery Dennison
Smartrac
Quick Guide

January 2023

RFID labels for Supply Chain



Why RFID?

- Reduced packing errors.
- Highlights and reduces errors upon delivery.
- More accurate and advanced shipping notifications.
- No line of sight required to read item information.
- Long read range (up to 10 meters).

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.






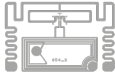
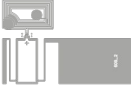



Our RFID product recommendations

Product Name	Design (not to scale)	Antenna Dimensions	Chip	EPC and User Memory	TID Memory	Delivery Format	Applications
AD-226		95 x 8.15 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-239		70 x 14.5 mm 2.76 x 0.57 in	Impinj M730 Impinj M750	128-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label	Apparel Industrial Applications
AD-23x		70 x 14.5 mm 2.76 x 0.57 in	NXP UCODE 9	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label	Apparel Industrial Applications
AD-23x Pure		70 x 14.5 mm 2.76 x 0.57 in	NXP UCODE 9	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label	Apparel Industrial Applications
AD-23x Slim		70 x 10.5 mm 2.75 x 0.413 in	NXP UCODE 9	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label	Apparel Industrial Applications
AD-366		73.1 x 37.7 mm 2.88 x 1.49 in	NXP UCODE 9	96-bit and n/a	96-bit / 48-bit unique serial number	Label	Inventory Management Loss Prevention
AD Belt		70 x 14 mm 2.75 x 0.55 in	NXP UCODE 9	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 Belt		70 x 14 mm 2.75 x 0.55 in	Impinj M730	96-bit and 32-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Supply Chain Management Home Essentials Inventory and Logistics
AD Belt		70 x 14 mm 2.75 x 0.55 in	Impinj M750	96-bit and 32-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Supply Chain Management Home Essentials Inventory and Logistics
AD Bullseye™ NFC		Ø 35 mm 1.378 in	NXP NTAG213	144 bytes	N/A	Wet inlay	Traceability Product Provenance
AD Bullseye™ NFC		Ø 35 mm 1.378 in	NXP NTAG216	888 bytes	N/A	Wet inlay	Traceability Product Provenance
AD Circus™ Flex		Ø 20 mm 0.79 in	NXP NTAG213	144 bytes	N/A	Dry inlay Wet inlay	Traceability Product Provenance
AD Circus™ NFC		Ø 20 mm 0.79 in	NXP NTAG213	144 bytes	N/A	Dry inlay Wet inlay	Traceability Product Provenance
AD Circus™ NFC		Ø 20 mm 0.79 in	NXP NTAG216	888 bytes	N/A	Wet inlay	Traceability Product Provenance

Our RFID product recommendations

Product Name	Design (not to scale)	Antenna Dimensions	Chip	EPC and User Memory	TID Memory	Delivery Format	Applications
AD Circus™ NFC		Ø 20 mm 0.79 in	ST25TN512	64 bytes user memory	N/A	Wet inlay	Traceability Product Provenance
AD Circus™ NFC		Ø 20 mm 0.79 in	ST25TN01K	160 bytes user memory	N/A	Wet inlay	Traceability Product Provenance
AD Circus™ NFC		Ø 20 mm 0.79 in	NXP NTAG210 Micro	48 bytes	N/A	Wet inlay	Traceability Product Provenance
AD Circus™ Pro		Ø 20 mm 0.79 in	NXP NTAG424 DNA	416 bytes	N/A	Wet inlay	Traceability Product Provenance
AD Circus™ Pro		Ø 20 mm 0.79 in	EM4332	208 bytes	N/A	Wet inlay	Traceability Product Provenance
AD Dogbone		94 x 24 mm 3.70 x 0.90 in	NXP UCODE 7XM	448-bit and 2048-bit 448-bit and 1024-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Sports Timing Glass and Automobile Tracking Inventory
AD Dogbone		94 x 24 mm 3.70 x 0.90 in	NXP UCODE 8	128-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Sports Timing Glass and Automobile Tracking Inventory
AD Dogbone		94 x 24 mm 3.70 x 0.90 in	Impinj M730	96-bit and 32-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Inventory and Logistics Sports Timing Supply Chain Management
AD Dogbone		94 x 24 mm 3.70 x 0.90 in	Impinj M750	96-bit and 32-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay Label / sticker	Inventory and Logistics Sports Timing Supply Chain Management

Our RFID product recommendations

Product Name	Design (not to scale)	Antenna Dimensions	Chip	EPC and User Memory	TID Memory	Delivery Format	Applications
AD Shortdipole		92.75 x 11 mm 3.65 x 0.43 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 Shortdipole		92.75 x 11 mm 3.65 x 0.43 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	Returnable Transport Units (RTUs) Supply Chain Management Brand Protection
AD Frog 3D		68 x 68 mm 2.68 x 2.68 in	Impinj Monza 4D	128-bit and 32-bit	96-bit / 48-bit unique serial number	Wet inlay Label / sticker	Asset Tracking Package tracking
AD MedioWeb DF		45 x 28.5 mm 1.772 x 1.122 in	EM4425	96-bit / up to 480-bit	96-bit (UHF) / 64-bit (HF) overlapping	Dry+, Label	RTIs, Cardboard box, Medical device
AD Midas Flagtag DF		48 x 31.4 mm 1.890 x 1.236 in	EM4425	96-bit / up to 480-bit	96-bit (UHF) / 64-bit (HF) overlapping	Label	On-Metal use Cases, Customer Engagement
AD Midas Flagtag		31.41 x 18 mm 1.24 x 0.71 in	Impinj Monza R6	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	On-Metal Asset Tracking Metal / Liquids Supply Chain Management
AD Midas Flagtag		31.41 x 18 mm 1.24 x 0.71 in	Impinj Monza R6-P	128-bit / 96-bit and 32-bit / 64-bit	96-bit / 48-bit unique serial number	Wet inlay	On-Metal Asset Tracking Metal / Liquids Supply Chain Management
AD Slim DF		74.2 x 10.7 mm 2.921 x 0.421 in	EM4425	96-bit / up to 480-bit	96-bit (UHF) / 64-bit (HF) overlapping	Dry inlay Wet inlay	RTIs, Medical device

Contact information

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Warranty: Please refer to Avery Dennison standard terms and conditions: 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.

