

Avery Dennison
Smartrac
Quick Guide

September 2021

RFID Labels for Aviation



Why RFID?

- Mishandling rates reduced by 13%*.
- Ramp loading time cut by 4 minutes per aircraft turn*.
- Baggage handling system throughput increases up to 18%*.
- Read rates are 99.5% or better, which is 8 - 10% more than current barcode levels.
- Enhanced services for passengers such as real-time baggage tracking.

Why Avery Dennison?

As an IATA strategic partner

- Instrumental in supporting IATA to drive the RFID baggage tracking initiative globally.
- Significant contributor to the development of the IATA RFID implementation guide.
- Supporting industry education on RFID through IATA workshops globally.

Aviation RFID baggage industry ecosystem

- Focused on an end-to-end baggage journey ecosystem play providing full end to end deployment and integration.
- Global operational experience with leading airlines and airports in supporting the original and ongoing deployments of RFID with best-of-breed ecosystem partners.

Unique value















- Dedicated global aviation industry team.
- Position why RFID is a proven technology for baggage tracking.
- Supporting stakeholders to meet IATA R753 compliance.
- Uniquely positioned to discuss improving the passenger experience.
- “Trusted advisor” within the aviation industry.

*Based on data provided by a major international carrier.

As an officially recognized IATA Strategic Partner, Avery Dennison contributes thought leadership and technological innovation in the field of RFID for the Aviation industry.



Our RFID product recommendations

Product Name	Design (not to scale)	Antenna Dimensions	Chip	EPC and User Memory	TID Memory	Delivery Format	Applications
AD-373		53 x 19 mm 2.09 x 0.75 in	NXP UCODE 7XM	448-bit and 2048-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Asset Tracking
AD-553		38 x 76 mm 1.50 x 2.99 in	NXP UCODE 8	128-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Baggage Tracking
AD-554		38 x 76 mm 1.50 x 2.99 in	Impinj Monza R6-B	96-bit and n/a	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Baggage Tracking
AD-560		38 x 70 mm 1.50 x 2.76 in	Impinj Monza 4QT	128-bit and 512-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Baggage Tracking
AD-681		50 x 50 mm 1.97 x 1.97 in	Impinj Monza 4D	128-bit and 512-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Asset Tracking Package Tracking Supply Chain Management
AD-681		50 x 50 mm 1.97 x 1.97 in	Impinj Monza 4MD	128-bit and 32-bit	96-bit / 48-bit unique serial number	Dry inlay Wet inlay	Asset Tracking Package Tracking Supply Chain Management
Bullseye™		Ø 33 mm 1.30 in	NXP ICODE SLIX2	2500-bit	N/A	Label / sticker	Consumer Experience
Bullseye™ NFC		Ø 35 mm 1.378 in	NXP NTAG213	144 bytes	N/A	Wet inlay	Consumer Experience
Circus™		Ø 18 mm 0.71 in	NXP ICODE SLIX 2	2500-bit	N/A	Wet inlay	Consumer Experience
Circus™ Flex		Ø 20 mm 0.79 in	NXP NTAG213	144 bytes	N/A	Wet inlay	Consumer Experience
Circus™ NFC		Ø 20 mm 0.79 in	NXP NTAG210 Micro	48 bytes	N/A	Wet inlay	Consumer Experience
Circus™ Pro		Ø 20 mm 0.79 in	NXP NTAG424 DNA	416 bytes	N/A	Wet inlay	Consumer Experience
Circus™ On Metal		Ø 20 mm 0.79 in	EM4332	208 bytes	N/A	Wet inlay	Consumer Experience
Wings		30 x 72 mm 1.18 x 2.84 in	NXP UCODE 8	128-bit and 512-bit	96-bit / 48-bit unique serial number	Dry inlay	Baggage Tracking

Contact information

rfid.averydennison.com/contact

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

International: +1-678-617-2359

© 2021 Avery Dennison Corp. All rights reserved. 170 Monarch Lane, Miamisburg, OH 45342, USA Third party trademarks and/or trade names used herein are the property of their respective owner(s). Some of the trademarks appear for identification purposes only.

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.

