Avery Dennison Smartrac Product Data Sheet

# AD-553 U8

#### Overview

Frequency Band UHF 860 - 960 MHz

Chip NXP UCODE 8

**Antenna Dimensions** 38 x 76 mm / 1.50 x 2.99 in

International Standard ISO/IEC 18000-63 Type C

Industry Segments Aviation

Applications Baggage Tracking

#### RoHS

EU Directive 2011/65/EU and Directive (EU) 2015/863

REACH Regulation (EC) No. 1907/2006



## The aviation asset tracking solution

AD-553u8 inlays from Avery Dennison is a top choice for tagging aviation baggage in accordance with IATA Resolution 753. The product provides excellent broadband (860-960 MHz) read range performance across multiple regions including Europe, Asia-Pacific and the Americas.

The 38 x 76mm design exhibits long distance read capture from all directions, regardless of tag-to-reader alignment and meets category performance requirements for Spec U under Auburn University's ARC testing program.

AD-553u8's UCODE 8 chip from NXP features 128-bit of EPC memory and a 96-bit unique factory-locked TID number. A 48-bit unique serial number is factory-encoded into the TID. Available delivery formats include both dry inlay and wet inlay.

Like all RFID products from Avery Dennison, AD-553u8 inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University: The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.



## **Technical features**

Chip	NXP UCODE 8	
EPC and User Memory	128-bit and n/a	
TID Memory	96-bit / 48-bit unique serial number	
Product Code	RF602234 / IL-604494	RF602236 / IL-605627
Delivery Format	Dry inlay	Wet inlay
Die-Cut Dimension	_	41 x 79 mm / 1.62 x 3.12 in
Inlay Substrate	40# Paper	40# Paper
Total Thickness	11.5 - 13.5 mils / 292 - 343 microns	13.9 - 15.9 mils / 353 - 404 microns
Standard Pitch	95.25 mm / 3.75 in	95.25 mm / 3.75 in
Web Width	45 mm / 1.772 in	45 mm / 1.772 in
Core Size	76 mm / 3 in	76 mm / 3 in
Quantity / Reel	7,861 pcs/reel	5,000 pcs/reel
Operating Temperature	-40 °C to 85 °C / -40 °F to 185 °F	-40 °C to 85 °C / -40 °F to 185 °F
On-Metal	Non metal	Non metal
Certificates	ARC - Spec U	ARC - Spec U

### Orientation sensitivity

290 280

270

260

250 240

230

### Read range



All graphs are indicative: performance in real life applications may vary.

#### **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.

