Avery Dennison Smartrac Product Data Sheet



# AD Force U9 Pure 95<sup>TM</sup>

### Overview

Frequency Band UHF 860 - 960 MHz

Chip

NXP UCODE 9

IC Attachment Technology

Strap Attach

Antenna Dimensions
50 x 30 mm / 1.97 x 1.18 in

International Standard ISO/IEC 18000-63 Type C

**Industry Segments** 

Apparel

General Retail

**Applications** 

Supply Chain Management Home Essentials

Brand Protection

RoHS

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

**REACH** 

Regulation (EC) No. 1907/2006

End of Life

Paper recyclability: PTS- RH021:97/2012



# Combining performance and versatility

AD Force U9 Pure 95<sup>TM</sup> from Avery Dennison Smartrac is a high performing inlay suitable for a wide variety of RFID tagging applications. It features the UCODE 9 chip by NXP. The applications, including apparel and general retail.

#### Sustainability

AD Force U9 Pure 95<sup>TM</sup> inlay antenna is produced with pure aluminum, replacing the PET aluminum laminate that is traditionally used in standard antenna production. By removing the plastic based layer, the total inlay construction is up to 95% plastic free in both wet inlay and label formats. A minimal amount of plastic-strap is used for the IC attachment.

The innovative manufacturing process also enables other benefits, such as recycling excess materials and reducing the total amount of materials while maintaining the overall performance of the product. In addition, based on extensive testing against PTS-RH 021:97/2012 paper and cardboard recycling method with third party laboratorio shows that AD Pure  $95^{TM}$  inlays and labels are recyclable within the items.

#### Application

AD Force U9 Pure  $95^{TM}$  feature 96-bit of EPC memory as well as a 96-bit unique factory locked TID number. A 48-bit unique serial number is factory-encoded into the TID. Delivery formats include wet and label. AD Force U9 Pure  $95^{TM}$  has passed ARC category Spec Q, F, G, I, K, L, N, R, Y, W1, W2, W3, W4, W5, and W6.

#### Quality

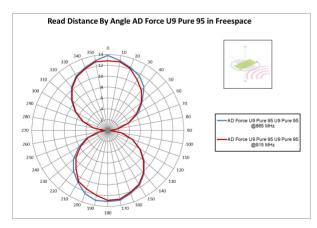
Avery Dennison inlays and tags are compliant with ISO 9001:2015 Quality Management and ISO 14001:2015 Environmental Management, which ensure a reliable and state-of-the-art product that meets a variety of application needs, especially in the retail environment.



## Technical features

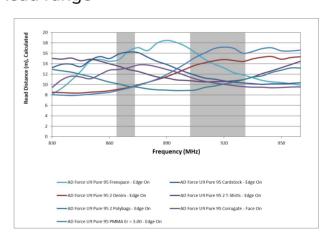
Chip / IC Attachment Technology	NXP UCODE 9 / Strap Attach		
EPC and User Memory	96-bit and n/a		
TID Memory	96-bit / 48-bit unique serial number		
Product Code	IL-609621	IL-609622	IL-609623
Delivery Format	Dry Inlay	Wet inlay	Label
Die-Cut Dimension	50 x 30mm / 1,9" x 1,18"	54 x 34 mm / 2.13 x 1.34 in	54 x 34 mm / 2.13 x 1.34 in
Inlay Substrate	40# paper	40# Paper	40# Paper
Face Sheet	N/A	N/A	TT2C
Total Thickness	11.5 - 13.5 mils / 292.1- 342.9 microns	12.5 – 14.5 mils / 317.5 – 368.3 microns	16.0 – 18.0 mils / 406.4 – 457.2 microns
Standard Pitch	38,1mm/	38.1 mm / 1.5 in	38.1 mm / 1.5 in
Web Width	58mm /	58 mm / 2.28 in	58 mm / 2.28 in
Core Size	76mm / 3"	76 mm / 3 in	76 mm / 3 in
Quantity / Reel	10.000 pcs/reel	5,767 pcs/reel	1,595 pcs/reel
Size of Roll	MAX OD: 15"	MAX OD: 13"	MAX OD: 8"
Operating Temperature	-40 °C to 85 °C / -40 °F to 185 °F		
On-Metal	Non metal		
Certificates	ARC: Q, F, G, I, K, L, N, R, Y, W1, W2, W3, W4, W5, and W6.		

# Orientation sensitivity



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

# Read range



### **Contact information**

rfid.averydennison.com/contact +1-678-617-2359

Connect with us on:













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.