AD-327-U9-FCC-02-22-EN-DS

Avery Dennison Smartrac Product Data Sheet

February 2022

# AD-327 U9 FCC

## Overview

Frequency Band UHF 860 - 960 MHz

Chip NXP UCODE 9

**Antenna Dimensions** 42.5 x 17 mm / 1.67 x 0.67 in

International Standard ISO/IEC 18000-63 Type C

Industry Segments Apparel Logistics Healthcare

Applications

Supply Chain Management Home Essentials Inventory and Logistics

**RoHS** EU Directive 2011/65/EU and 2015/863 Compliant



# Excellent read range and versatility

#### Superior performance across a wide range of dielectrics

AD-327 U9 FCC inlays from Avery Dennison Smartrac are ideally suited for a wide variety of RFID tagging applications, particularly those related to the areas of supply chain, inventory & logistics, apparel, and pharmaceutical & healthcare.

The Gen2 UHF RFID inlay's  $42.5 \times 17$ mm design is optimized for outstanding performance in the FCC frequency band (902-928 MHz) and features the UCODE 9 IC by NXP.

AD-327 U9 FCC's UCODE 9 chip features 96-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. UCODE 9 supports all mandatory commands of EPC global specification Gen2v2.1 including Kill Command and optional command, BlockWrite (2 words, 32-bit).

Delivery formats include dry inlay, wet inlay and paper label.

Like all RFID products from Avery Dennison, AD-327 U9 FCC 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.

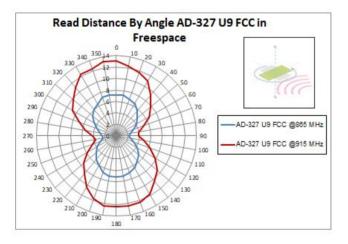


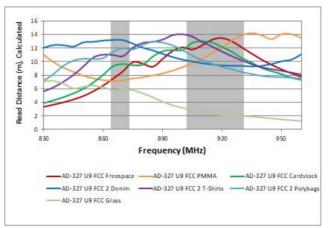
### **Technical features**

Chip	NXP UCODE 9		
EPC and User Memory	96-bit and n/a		
TID Memory	96-bit / 48-bit unique serial number		
Product Code	RF602457 / IL-606179	RF602458 / IL-605967	RF101125 / IL-607099
Delivery Format	Dry inlay+	Wet Inlay	Label
Die-Cut Dimension	-	44.5 x 19 mm / 1.752 x 0.748 in	44.5 x 19 mm / 1.752 x 0.748 in
Inlay Substrate	40# Paper	40# Paper	40# Paper
Total Thickness	11 - 14 mils 292 - 343 microns	12 - 15 mils 323 - 374 microns	16 - 18 mils 411 - 463 microns
Standard Pitch	38.1 mm / 1.5 in	38.1 mm / 1.5 in	38.1 mm / 1.5 in
Web Width	50.8 mm / 2 in	50.8 mm / 2 in	50.8 mm / 2 in
Core Size	76 mm / 3 in	76 mm / 3 in	76 mm / 3 in
Inlays per Roll	TBD	TBD	TBD
Size of Roll	393.7 mm / 15.5 in MAX OD	330.2mm / 13 in MAX OD	203.2 mm / 8 in MAX OD
Operating Temperature	-40 °C to 85 °C -40 °F to 185 °F		
On-Metal	Non metal		
Certificate	Spec N, Spec Q, Spec G, Spec F, and Spec W5		

## **Orientation Sensitivity**







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

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

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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.

