

# AD Bolt U9 FCC

## Overview

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**Frequency Band**

UHF 860 - 960 MHz

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**Chip**

NXP UCODE 9

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**Antenna Dimensions**

42.5 x 17 mm / 1.67 x 0.67 in

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**International Standard**

ISO/IEC 18000-63 Type C

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**Industry Segments**

Apparel  
Logistics  
Healthcare

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**Applications**

Supply Chain Management  
Home Essentials  
Inventory and Logistics

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**RoHS**

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

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**REACH**

Regulation (EC) No. 1907/2006



## Excellent read range and versatility

### Superior performance across a wide range of applications

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

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

The NXP 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).

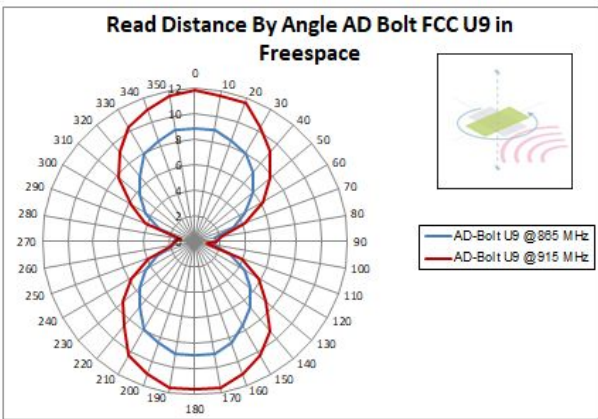
Delivery formats include dry inlay, wet inlay and paper label.

Like all RFID products from Avery Dennison, AD Bolt U9 FCC inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University. Avery Dennison Smartrac was the first company to receive the significant and comprehensive Auburn University ARC accreditation for quality of the design and manufacture of RFID inlays.

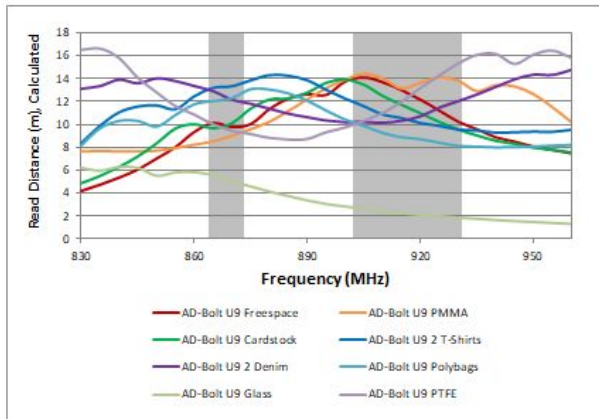
## Technical features

Chip	NXP UCODE 9			
EPC and User Memory	96-bit and n/a			
TID Memory	96-bit / 48-bit unique serial number			
Product Code	IL-609469	IL-609470	IL-609468	IL-609599
Delivery Format	Dry inlay+	Wet Inlay	Label	Label
Die-Cut Dimension	-	44.5 x 19 mm / 1.752 x 0.748 in	44.5 x 19.05 mm / 1.75 x 0.75 in	44.5 x 19.05 mm / 1.75 x 0.75 in
Inlay Substrate	40# Paper	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	16 - 18 mils 411 - 463 microns
Standard Pitch	25.4 mm / 1.0 in	25.4 mm / 1.0 in	38.1 mm / 1.5 in	25.4 mm / 1.0 in
Web Width	50.8 mm / 2 in	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	76 mm / 3 in
Inlays per Roll	13,000 GOOD +10%/-0	10,000 GOOD +10%/-0	3,000 GOOD +10%/-0	2,355 GOOD +10%/-0
Size of Roll	393.7 mm / 15.5 in MAX OD	330.2mm / 13 in MAX OD	279.4 mm / 11 in MAX OD	203.2mm / 8 in MAX OD
Operating Temperature	-40 °C to 85 °C -40 °F to 185 °F			
On-Metal	Non metal			
Certificate	<a href="#">ARC Specification Guide</a>			

## Orientation Sensitivity



## Read Range



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](https://www.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.

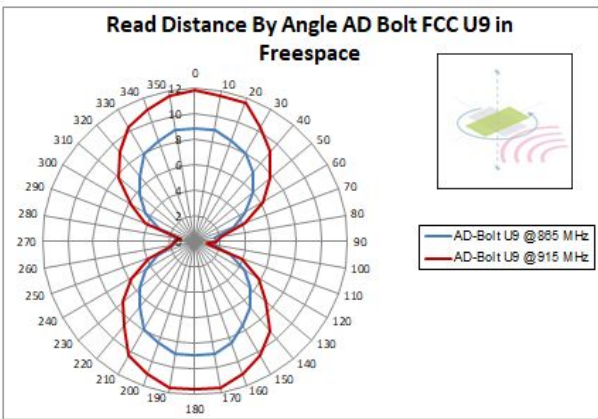
**Applications:** This product should be tested by the customer / user thoroughly under end use conditions to ensure the product meets the particular requirements. Avery Dennison does not represent that this product is fit for any particular purpose or use. Avery Dennison reserves the right to modify, 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.



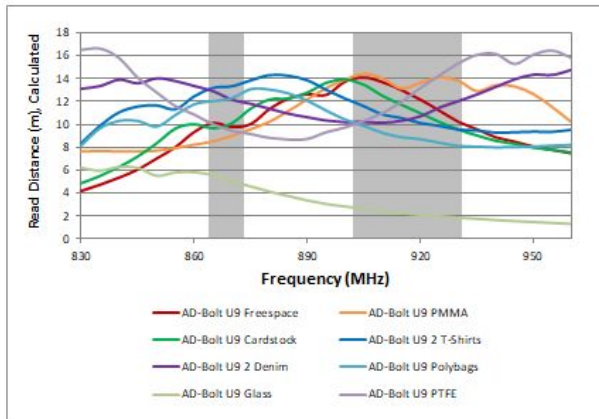
## Technical features

Chip	NXP UCODE 9	
EPC and User Memory	96-bit and n/a	
TID Memory	96-bit / 48-bit unique serial number	
Product Code	IL-610222	IL-610223
Delivery Format	Dry inlay+	Wet Inlay
Die-Cut Dimension	-	44.5 x 19 mm / 1.75 x 0.75 in
Inlay Substrate	Opaque PET	Opaque PET
Total Thickness	10.6 - 12.6 mils 269.24 - 320.04 microns	11.8 - 13.8 mils 299.72 - 350.52 microns
Standard Pitch	25.4 mm / 1.0 in	25.4 mm / 1.0 in
Web Width	50.8 mm / 2 in	50.8 mm / 2 in
Core Size	76 mm / 3 in	76 mm / 3 in
Inlays per Roll	14,395 pcs/reel	9,090 pcs/reel
Size of Roll	393.7 mm / 15.5 in MAX OD	330.2mm / 13 in MAX OD
Operating Temperature	-40 °C to 85 °C -40 °F to 185 °F	
On-Metal	Non metal	
Certificate	<a href="#">ARC Specification Guide</a>	

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