

# AD-190u8

## Overview

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**Frequency Band**

UHF 860 - 960 MHz

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**Chip**

NXP UCODE 8

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**Antenna Dimensions**

22 x 12.5 mm / 0.86 x 0.49 in

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**International Standard**

ISO/IEC 18000-63 Type C

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**Industry Segments**

Apparel  
Healthcare  
Beauty and Personal Care

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**Applications**

Fashion Jewelry and Sunglasses  
Pharmaceutical and Healthcare  
Personal Care Products

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**RoHs**

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

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## Exceptional performance across a wide range of dielectrics

AD-190u8 RAIN UHF RFID inlays from Avery Dennison are recommended for tagging a wide range of smaller products.

The 22 x 12.5 mm antenna is a global design with excellent broadband performance (860-930 MHz) that can achieve up to 3 meters read distance on popular beauty items such as fashion jewelry and cosmetics, as well as pharmaceuticals.

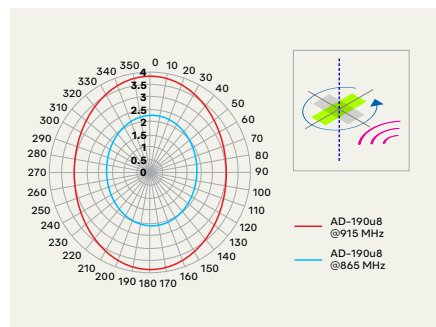
AD-190u8 inlays are equipped with a UCODE 8 ICs from NXP, featuring 128-bit of EPC memory and 48-bit unique serialized TID number. Delivery formats include dry inlay, wet inlay, and SmartFace Label.

Like all RFID products from Avery Dennison Intelligent Labels, AD-190u8 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.

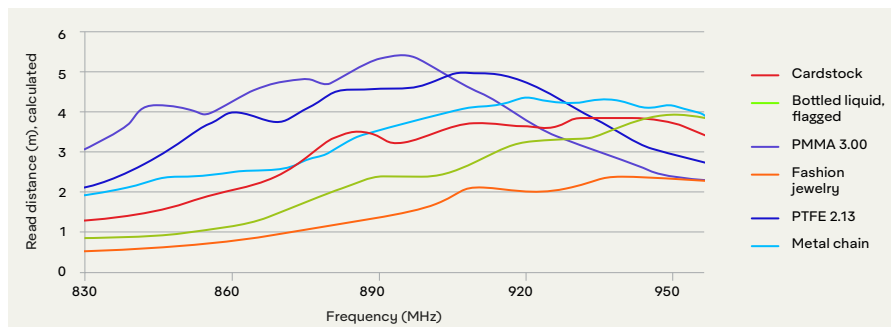
## Technical features

<b>Chip</b>	NXP UCODE 8		
<b>EPC and User Memory</b>	128-bit and n/a		
<b>TID Memory</b>	96-bit / 48-bit unique serial number		
<b>Product Code</b>	RF601393	RF601283	RF100600
<b>Delivery Format</b>	Dry inlay	Wet inlay	Label / sticker
<b>Die-cut Dimension</b>	-	24 x 16 mm / 0.95 x 0.61 in	32 x 15 mm / 1.25 x 0.60 in
<b>Inlay Substrate</b>	PET	PET	5pt Integrity
<b>Total Thickness</b>	10 - 12 mils / 261 - 312 microns	11 - 13 mils / 270 - 320 microns	14 - 16 mils / 368 - 419 microns
<b>Standard Pitch</b>	19.05 mm / 0.75 in	19.05 mm / 0.75 in	38.1 mm / 1.5 in
<b>Web Width</b>	36 mm / 1 in		
<b>Core Size</b>	76 mm / 3 in		
<b>Quantity / Reel</b>	15000 pcs/reel	13000 pcs/reel	3480 pcs/reel
<b>Operating Temperature</b>	-40 °C to 85 °C -40 °F to 185 °F		
<b>On-Metal</b>	Non metal		

## Orientation sensitivity



## Read range



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

## Contact information

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RoHS

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**Warranty:** Please refer to Avery Dennison Intelligent Labels standard terms and conditions: [rfid.averydennison.com/termsandconditions](http://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.

