



AD Squarewave U9 Pure 95™

Overview

Frequency Band

UHF 860 - 960 MHz

IC Attachment Technology

Strap Attach

Chip

NXP UCODE 9

Antenna Dimensions

93 x 11 mm / 3.66 x 0.43 in

International Standard

ISO/IEC 18000-63 Type C

Industry Segments

Logistics

Applications

Supply Chain Management
Inventory and Logistics

RoHS

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

REACH

Regulation (EC) No. 1907/2006

End of Life

EU Paper recyclability: PTS-
RH021:97/2012
US Paper Recyclability: SBS-E Part I
(Repulability) and Part II (Recyclability)



Ideal for a wide range of items in logistics

Avery Dennison's AD Squarewave U9 Pure 95™ inlays are designed for supply chain, inventory, and logistics. They offer maximum and efficient broadband performance in a small 93 x 11 mm size. Featuring the NXP UCODE 9, they include 96-bit EPC memory, a 96-bit TID, and a unique 48-bit serial number. With a read range of up to 20 meters, they provide reliable performance in various logistics settings. Delivery formats include Wet inlay and label formats.

Sustainability

AD Squarewave U9 Pure 95™ is produced via innovative antenna manufacturing technology where the aluminum antenna is made with pure aluminum, replacing the PET aluminum laminate traditionally used in standard antenna production. By eliminating 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 memory chip attachment. According to an LCA (Life Cycle Analysis) study by an independent institute the innovative manufacturing technology provides typically 70-90% savings in carbon footprint compared to traditional etching methods.

The manufacturing process also enables recycling excess materials and reducing the total amount of materials while maintaining the overall performance of the product. The impact of the Pure 95™ paper-based inlays and tags in cardboard recycling has been verified by a third-party laboratory in the EU against PTS-RH 021:97/2012. In the US, the hangtag construction is certified by West Michigan University against SBS-E Part I (repulpability) and Part II (recyclability). How2Recycle® has "pre-qualified*" the RFID construction when applied to a paper hangtag and determined that the structure is eligible for a widely recyclable label.

Quality

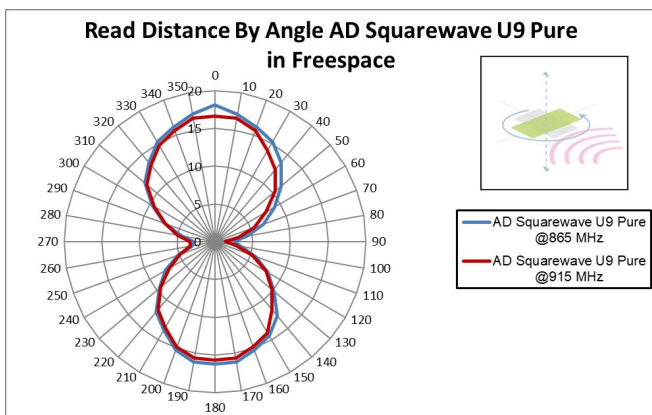
Like all RFID products from Avery Dennison, AD Squarewave U9 Pure 95™ inlays are manufactured according to the industry's highest quality standards, as confirmed by the RFID Lab at Auburn University. The inspection body awarded Avery Dennison its first comprehensive and significant ARC accreditation for quality.



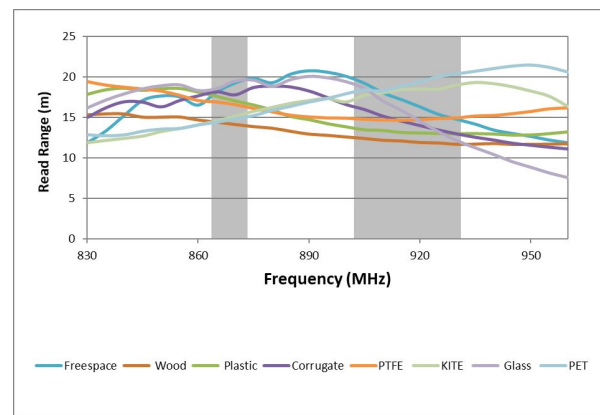
Technical features

Chip / 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	RF602946 / IL-610735	RF101497 / IL-610737
Delivery Format	Wet inlay	Label
Die-Cut Dimension	96 x 14 mm / 3.78 x 0.55 in	
Inlay Substrate	40# Paper	40# Paper
Face Sheet	–	TT2C
Total thickness (with the chip and release liner)	12.5 - 14.5 mils / 318 - 368 microns	16 - 18 mils / 406 - 457 microns
Standard Pitch	22.2 mm / 0.875 in	
Web Width	101.6 mm / 4 in	
Core Size	76 mm / 3 in	
Inlays per Roll	19,773 pcs/reel	5,467 pcs/reel
Size of Roll	13 in MAX OD	8 in MAX OD
Operating Temperature	-40 °C to 85 °C / -40 °F to 185 °F	
Certificates	N/A	

Orientation sensitivity



Read range



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

Contact information

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Connect with us on:



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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.