

AD Web DF EM4425

Overview

Frequency Band

UHF 860 - 960 MHz / NFC 13.56 MHz

Chip

EM4425 V12

Antenna Dimensions

50 x 30 mm / 1.96 x 1.18 in

International Standard

ISO 18000-63, EPC Class 1 Gen 2

Industry Segments

Apparel
Retail

Applications

Brand Protection
Supply Chain Management
Logistics

RoHS

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

REACH

Regulation (EC) No 1907/2006



The dual-frequency advantage in item-level tagging

Our AD Web DF EM4425 inlays and tags are designed for item-level tagging, brand protection, supply chain management, and logistics applications. Based on our successful Web UHF RFID product line, they combine excellent performance with a unique dual-frequency capability, operating in both NFC (HF) and UHF RFID frequency Ranges.

AD Web DF EM4425's dual-frequency capability provides powerful all-in-one solutions for, inter alia, consumer engagement, and product authentication, offering the possibility to manage the distribution channels and fight the black and grey market. The consumer can verify the authenticity of the purchased product, while the retailer can verify the authenticity of the returned product. Moreover, the interaction with the product before, during or after purchase, in-store or at home, offers a consistent consumer experience, regardless of the sales channel.

AD Web DF EM4425 inlays and tags have a compact 53 mm / 2.08 inch form factor, which can be easily converted into end-application usage, and are available in paper tag and wet delivery format. AD Web DF EM4425 comes with EM Microelectronic's EM4425 V12 echo-V IC that is equipped with 2048-bits shared user memory. It is accessible via UHF RFID and NFC (HF) frequencies, enabling the use of inexpensive, generally available readers (NFC-enabled smartphones) as supplements to dedicated UHF or HF reader infrastructures.

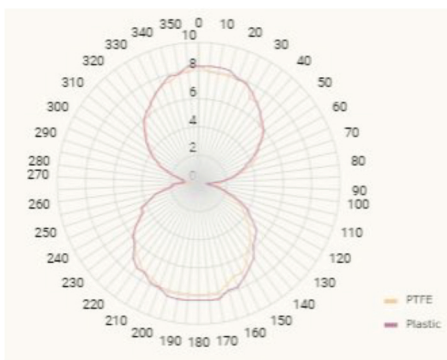
Avery Dennison inlays and tags are compliant with ISO 9001:2015 Quality Management and ISO 14001:2015 Environmental Management, which ensure a reliable and state-of-the-art product that meets a variety of application needs, especially in the retail environment.

Technical features

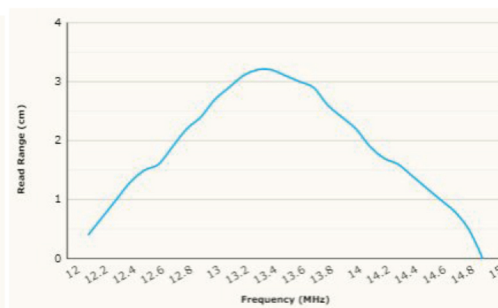
Chip	EM4425 V12
EPC and User Memory	96-bit / up-to 480-bit / 2048-bit UM
TID Memory	96-bit (UHF) / 64-bit (HF) overlapping
Product Code*	3008027
Delivery Format	Label / sticker
Die-Cut Dimension	53 x 33 mm / 2.087 x 1.299 in
Inlay Substrate	PET
Face Sheet	Mid-gloss paper
Standard Pitch	36 mm / 1.42 in
Web Width	60 mm / 2.36 in
Core Size	76 mm / 3 in
Operating Temperature	-40 °C to 85 °C -40 °F to 185 °F

*Other product codes available upon request.

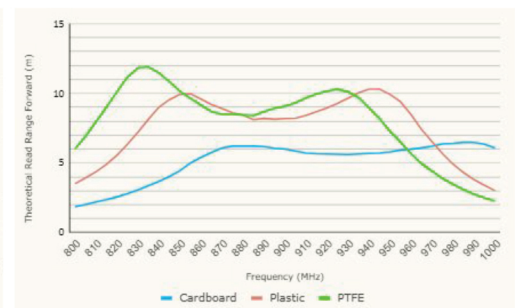
Theoretical Read Range Forward
Measurement @ 866 MHz



NFC Read Range

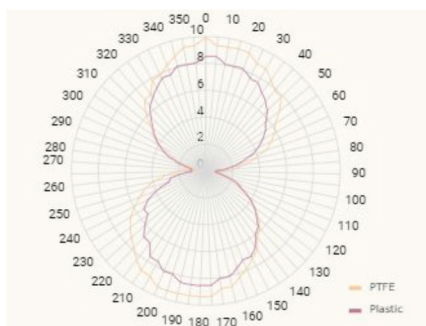


Read Range



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

Theoretical Read Range Forward Measurement
@ 915 MHz



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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.

