# AD Slim DF EM4425

### Overview

Frequency Band

UHF 860 - 960 MHz / NFC 13.56 MHz

Chip

EM4425 V12

**Chip Attachment Technology** 

Direct Chip Attach

**Antenna Dimensions** 

 $74.2 \times 10.7 \text{ mm} / 2.921 \times 0.421 \text{ in}$ 

International Standard

ISO 18000-63, EPC Class 1 Gen 2

**Industry Segments** 

Medical

Returnable Transport Items (RTI)

**Applications** 

Logistics

Supply Chain Management

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 Slim DF EM4425 inlays and tags are designed for item-level tagging, supply chain management, and logistics and industry applications. Based on our successful RFID Dual Frequency product line, AD Slim DF EM4425 combines excellent performance with a unique dual-frequency capability, operating in both NFC (HF) and UHF RFID frequency ranges.

AD Slim DF EM4425's dual-frequency capability provides powerful all-in-one solutions for, inter alia, supply chain management, product authentication and consumer engagement. The end user can verify the authenticity of the purchased product, while the distributor 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 Slim DF EM4425 inlays and tags have a compact  $74.2 \times 10.7$  mm antenna form factor, which can be easily converted into end-application usage, and is available in wet delivery format. AD Slim 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 and industry environments.

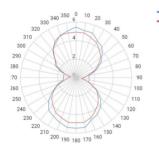


## Technical features

Chip	EM4425 V12
Chip Attachment Technology	Direct Chip Attach
EPC and User Memory	96-bit / up-to 480-bit / 2048-bit UM
TID Memory	96-bit (UHF) / 64-bit (HF) overlapping
Product Code*	3008898 / IL-604673
Delivery Format	Label / sticker
Die-Cut Dimension	77.2 x 13.7 mm / 3.039 x 0.539 in
Inlay Substrate	PET
Face Sheet	Clear PET
Standard Pitch	16.7 mm / 0.657 in
Web Width	90 mm / 3.543 in
Core Size	76 mm / 3 in
Operating Temperature	-40 °C to 85 °C -40 °F to 185 °F

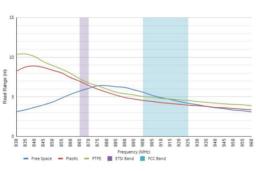
<sup>\*</sup>Other product codes available upon request.

## Read Distance on Free Space





#### Read Range



#### NFC Read Range



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







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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.

