# **Belt DF**

### Overview

Frequency Band UHF 860 - 960 MHz / NFC 13.56 MHz

Chip EM4425

**Antenna Dimensions** 70 x 20 mm / 2.76 x 0.79 in

International Standard ISO 15693 ISO/IEC 18000-63, EPC Gen2 V2

Industry Segments Apparel Industrial Applications

Applications Brand Protection Supply Chain Management Home Essentials

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

REACH Regulation (EC) No 1907/2006



# The dual-frequency advantage in item-level tagging

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

Belt DF'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.

Belt DF inlays and tags have a compact 76 mm / 3 inch form factor, which can be easily converted into end-application usage, and are available in paper tag delivery format. Belt DF comes with EM Microelectronic's EM4425 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.



## **Technical features**

Chip	EM4425
User Memory	2048-bit
TID Memory	Available
Product Code	3007478
Delivery Format	Label / sticker
Die-cut Dimension	73 x 23 mm / 2.874 x 0.905
Inlay Substrate	PET
Face Sheet	Mid-gloss paper
Standard Pitch	26 mm / 1.02 in
Web Width	76 mm / 3 in
Core Size	76 mm / 3 in
Operating	-40 °C to 85 °C
Temperature	-40 °F to 185 °F

# Orientation sensitivity



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

### NFC read range



### **UHF** read range



# Contact information

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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.



