



## Vortex 44 x 44 mm U9

The Vortex inlay/label from RICHRFID is a versatile, high-performance tag designed for a wide range of applications. It delivers reliable reading performance across supply chain management, inventory control, logistics, retail and apparel.

The product is complied with EPC global Class 1 Gen 2 , ISO 9001 quality management and ISO 14001 environmental management standards, ensuring reliable, industry-grade performance for diverse use cases.

Equipped with the NXP Ucode 9 IC, Minimesh-50x50-U9 feature 96-bit of EPC memory and a 96-bit unique factory locked TID number. A 48-bit unique serial number is factory-encoded into the TID. Delivery formats include dry inlay and label. The NXP IC is compatible with the global GS1 UHF Gen2v2 standard ISO/IEC 18000-63.

By enabling Privacy Mode, the label can be used for high-value products, authenticity verification, and applications requiring enhanced privacy protection.

The label size 50 x 50 mm and performance make it especially well-suited for retail application.

### Overview

#### Frequency Band

UHF 860-960 MHz

#### Chip Type

NXP Ucode 9

#### Dimensions

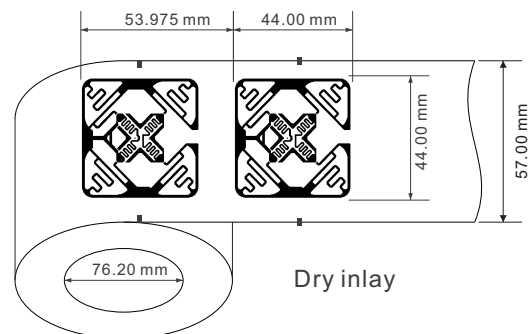
44 x 44 mm / 1.73 x 1.73 in

#### Air Interface Protocol

ISO/IEC 18000-63 Type C

#### Application

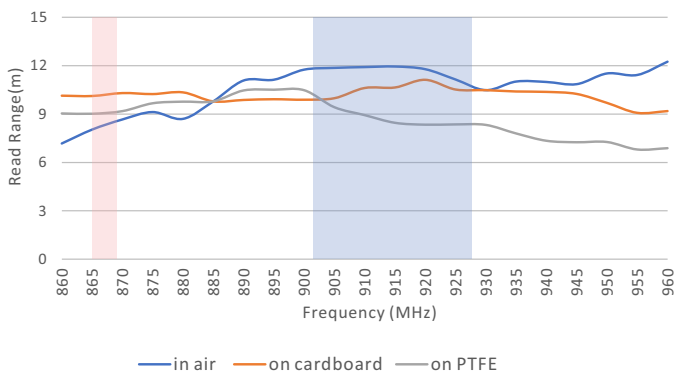
- Retail & Apparel
- Asset tracking
- Smart packaging
- Authentication



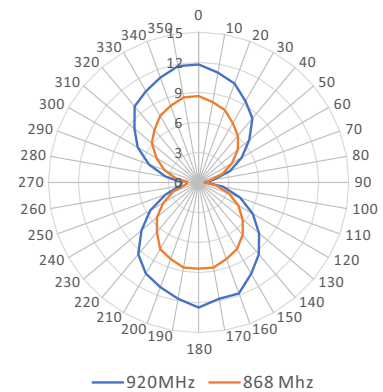
## Technical Features

Chip Type	NXP Ucode 9	
EPC	96 bits	
User	N/A	
TID	96 bits	
Model	—	RC5041
Delivery Format	Dry Inlay	Label
Die-Cut Dimension	—	50 x 50 mm / 1.97 x 1.97 in
Inlay Substrate	50 um PET	50 um PET
Face Material	—	Coated Paper
Adhesive	—	Hot Melt
Standard Pitch	53.975 mm / 2.12 in	53.975 mm / 2.12 in
Web Width	57 mm / 2.24 in	57 mm / 2.24 in
Core inner Diameter	76.2 mm / 3.0 in	76.2 mm / 3.0 in
Operating Temperature	-40°C to 85°C / -40°F to 185°F	
Storage Condition	20±5°C, 50±10% RH, Store away from sunlight	
Installation	—	Adhesive on clean & dry surface
Customization	Encoding, Designing, etc.	Printing, Encoding, Designing, etc.
Package	10,000 pcs / roll, 4 rolls / box	2,500 pcs / roll, 4 rolls / box
Application	Non-metal	

## Read Range(2W ERP)



## Radiation Pattern



PS: The performance is theoretical values in the lab and the actual effect depends on the specific applications.

**RICHRFID**

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