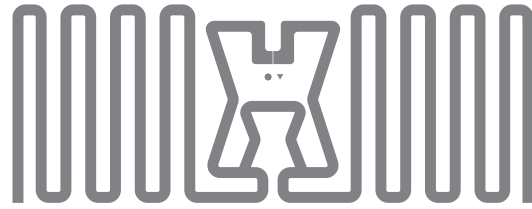


## KEY DATA

Chip: UCODE 8  
Antenna Size: 42 × 16 mm  
Format: Dry Inlay, Wet Inlay,  
White Paper

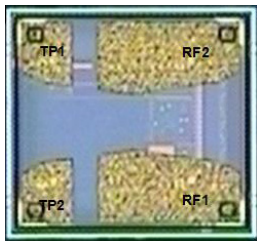


**RS-HY4216U8-2**

## APPLICATION

Supply Chain & Logistics Management  
Warehouse Management

## OVERVIEW



RS-HY4216U8-2 UHF RFID Dry Inlay is built with NXP UCODE 8.

The U8 IC offer high performance and features for use in the most demanding RFID tagging applications.

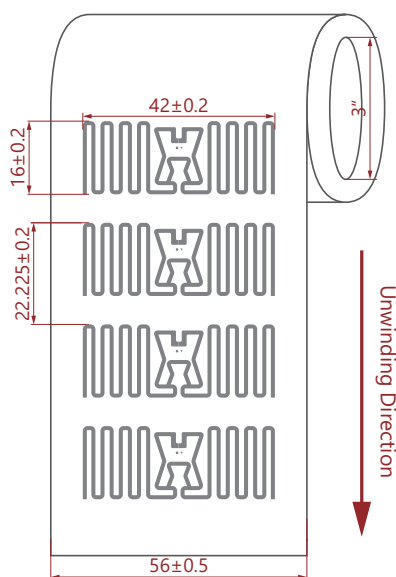
Particularly well suited for inventory management applications, like e.g Retail and Fashion, with its proven RF performance for any given form factor, UCODE 8 enables long read distance and fast inventory of dense RFID tag population. With its broadband design, it offers the possibility to manufacture true global RFID label with high performance over worldwide regulations.

The device also provides an Self Adjust Feature, a Product Status Flag for Electronic Article Surveillance (EAS) application, pre-serialized 96-bit EPC, Brand Identifier and the EPC Gen2v2 complaint Untraceable command.

## DIMENSIONS

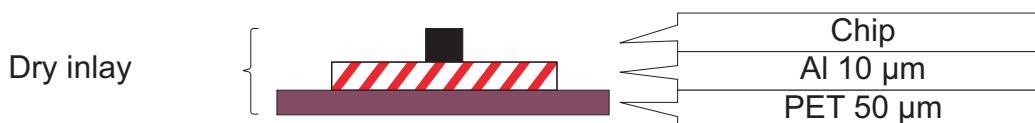


## ORIENTATION



Physical characteristics	Dimensions
Antenna size	42 × 16 mm
Inlay pitch	22.225 mm
PET width	56 mm
Dry Inlay thickness	Al 10 μm + PET 50 μm
Reel detail	Web width: 56 ± 1.0 mm Inner core diameter: 3" (76.2 mm) Core thickness: 5 ± 2 mm

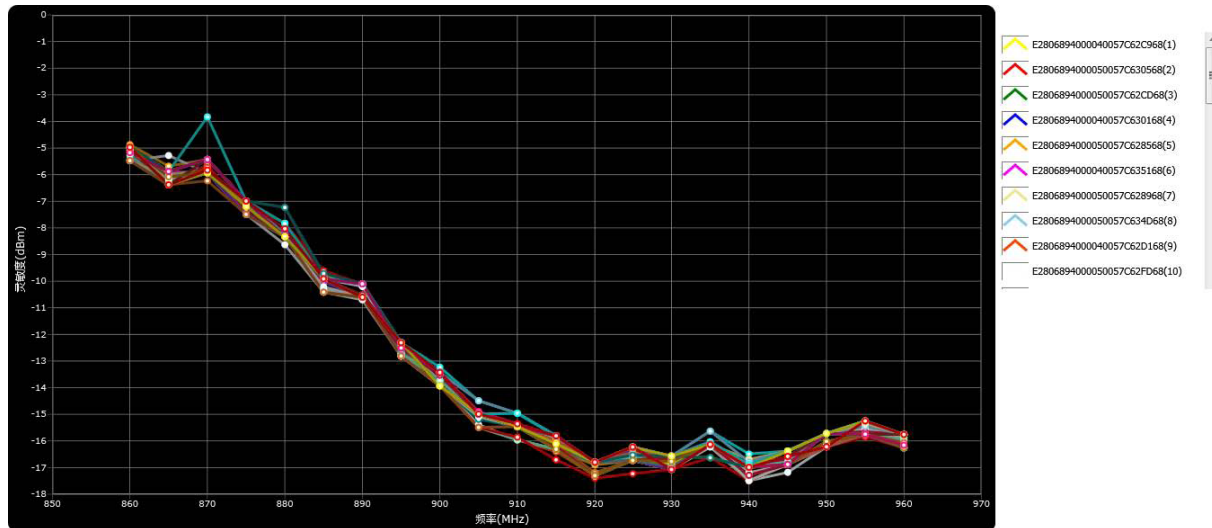
## STRUCTURE



## ELECTRICAL CHARACTERISTICS

Item		Description
Manufacture/IC		NXP UCODE 8
Base Material		PET
Antenna		Etched Al (10 μm) + PET (50 μm)
Protocol		RAIN RFID / ISO 18000-6C and EPC global Gen2v2 Compliant
Memory	User	None
	TID	96 bits
	EPC	128 bits
	Password	Kill Password - 32 bits
Access Password - 32 bits		
Frequency		860 ~ 960 MHz
Operating Mode		Passive
IC Life		100,000 Programming cycles, 50years data retention
ESD Voltage Immunity		Max. 2000 V

## TAG PERFORMANCE



## ENVIRONMENTAL REQUIREMENT

- Operating Temperature/Humidity:  $-5^{\circ}\text{C} \sim 60^{\circ}\text{C}$  / 20% ~ 80% RH
- Storage Temperature/Humidity:  $20^{\circ}\text{C} \sim 30^{\circ}\text{C}$  / 20% ~ 60% RH
- Shelf Life: From the date of manufacture, 1 year in anti-static bag at  $20^{\circ}\text{C} \sim 30^{\circ}\text{C}$  / 20% ~ 60% RH, and avoid direct sunlight exposure

## PACKAGING

Reference Packing: Static-free bag with zipper; 10000  $\pm$  100 Pcs/roll, 4 rolls/ctn (Actual Qty as per Shipping Mark).

