

Inlay Features

- EPC Class1 Gen2 compliant
- Hybrid loop-dipole configuration
- Medium read range.
- Good orientation insensitivity
- Good near field performance.
- Fits well into very small sized labels
- Optimized performance when attached to paper.
- Supports NXP dies
- Based on the design by NXP

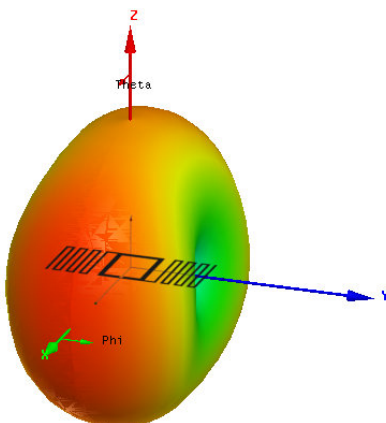
Applications

- Item-level logistics
- Pharmaceutical applications

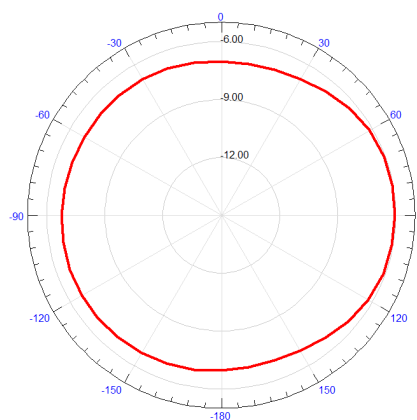
Inlay Layout and Dimensions

	UH210
Antenna width	34 mm ± 0.5 mm (1.34 ± 0.02 in)
Antenna length	14 mm ± 0.5 mm (0.5 ± 0.02 in)
Lengthwise pitch	tbd
Web width	tbd

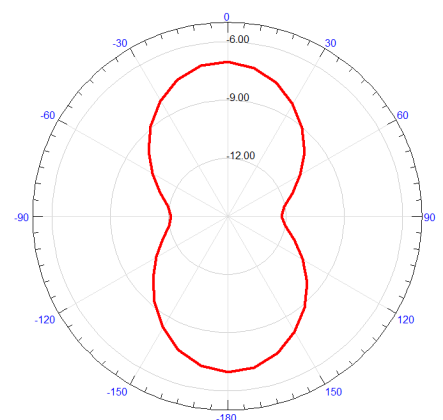
3D Radiation pattern



[Z,X] Radiation pattern



[Y,Z] Radiation pattern





Inlay Composition

Composition	Material	Thickness* [µm]
Top	Aluminum	9 ± 5%
Support	Polyester PET	38 ± 5%

* Overall thickness depends on the IC. For IC thickness please refer to the "Available ICs" table

Available ICs

	NXP UCode G2XL	NXP UCode G2XM	
Product code	UH210-G2XL	UH210-G2XM	
Operating frequency	840 ÷ 960 MHz		
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C		
Thickness	150µm ± 15µm	150µm ± 15µm	
Operating temperature	-40 °C to +85 °C	-40 °C to +65 °C	
Storage temperature	-55 °C to +125 °C	-55 °C to +125 °C	
Unique serial number	32 bits in TID	32 bits in TID	
EPC code	240 bits	240 bits	
User memory	n/a	512 bits	
TID	64 bits (read only)	64 bits (read only)	
Reserved memory	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	
Write endurance	10 years	10 years	
Data retention	10 000 cycles	10 000 cycles	

General supply conditions

Reel dimensions	Internal diameter	76 mm
	External diameter	< 200 mm (custom sizes available upon request)
Reel quantity	Inlay per reel	2500 ± 10% (custom sizes available upon request)