

Inlay Features

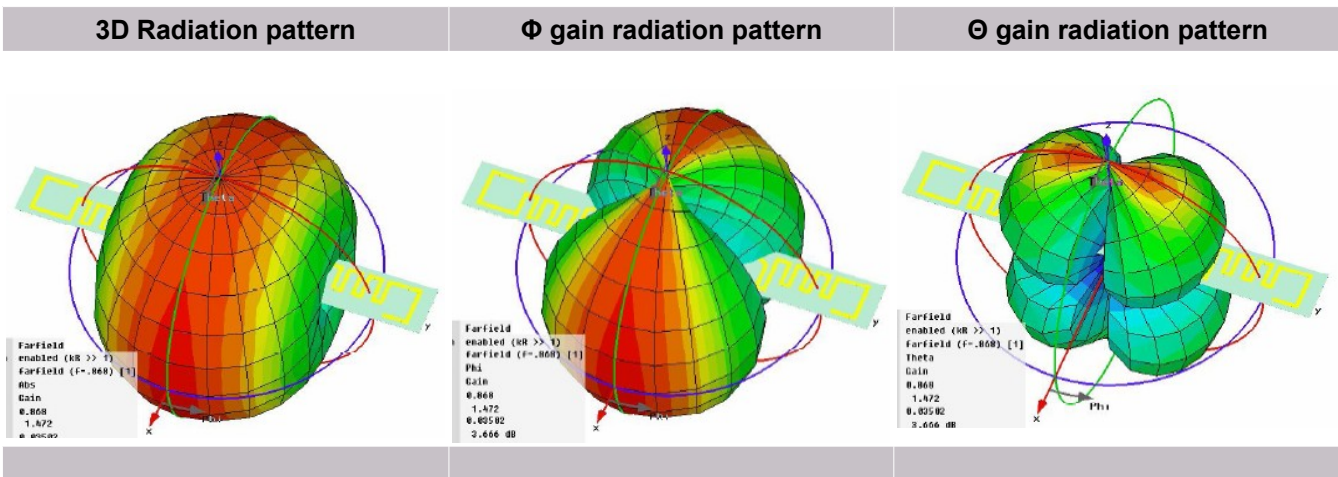
- EPC Class1 Gen2 compliant
- Dipole configuration
- Very good read range.
- High orientation insensitivity
- Designed to work in environment with high density of tags
- Optimized performance when attached to different materials (non metallic)
- Based on a reference design by NXP
- Supports NXP UCode dies.

Applications

- Logistics

Inlay Layout and Dimensions

	UH295
Antenna width	10 mm ± 0.5 mm (1.18 ± 0.02 in)
Antenna length	95 mm ± 0.5 mm (1.97 ± 0.02 in)
Lengthwise pitch	tbd
Web width	tbd



**Inlay Composition**

Composition	Material	Thickness* [µm]
Top	Aluminium	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 G2iL	NXP UCode G2iL+	
Product code	UH295-G2iL	UH295-G2iLP	
Operating frequency	840 ÷ 960 MHz		
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C		
Thickness	75µm ± 15µm	75µm ± 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	128 bits	128 bits	
User memory	n/a	n/a	
TID	64 bits (read only serialized)	64 bits (read only serialized)	
Reserved memory	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	
Write endurance	20 years	20 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)