

Inlay Features

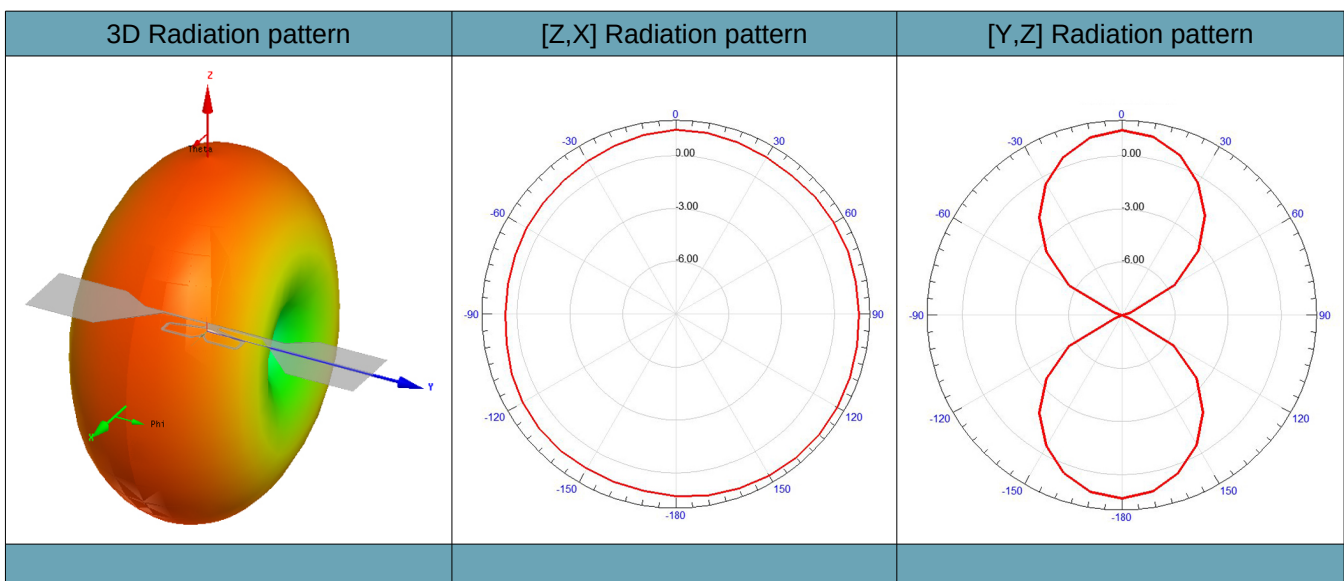
- Rain RFID compliant
- Dipole configuration
- Very long read range
- Good orientation insensitivity
- Designed to work in environment with high density of tags
- Supports NXP UCode and EM Marin dies

Applications

- Logistics

Inlay Layout and Dimensions

	UH107
Antenna width	90.85 mm \pm 0.5 mm (3.58 \pm 0.02 in)
Antenna length	17.85 mm \pm 0.5 mm (0.70 \pm 0.02 in)
Lengthwise pitch	31.75 mm \pm 0.5 mm (1.25 \pm 0.02 in)
Web width	100 mm \pm 0.5 mm (3.94 \pm 0.02 in)



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 7	EM Marin EM4124	EM Marin EM4126
Product code	UH107-U7	UH107-EM4124	UH107-EM4126
Operating frequency	860 ÷ 960 MHz		
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C		
Thickness	120μm ± 15μm	152μm ± 15μm	152μm ± 15μm
Operating temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Unique serial number	Automatic TID based self serialization	32 bits in EPC & TID bank	32 bits serialized in EPC, non locked
EPC code	128 bits	96 bits	208 bits
User memory	-	-	-
TID (locked)	96 bits	64 bits	32 bits
Reserved memory	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	-
Write endurance	20 years	10 years	10 years
Data retention	100 000 cycles	10 000 cycles	10 000 cycles

General supply conditions

Reel dimensions	Internal diameter	76 mm
	External diameter	< 300 mm (custom sizes available upon request)
Reel quantity	Inlay per reel	16 000 ± 10% (custom sizes available upon request)