

### Inlay Features

- EPC Class1 Gen2 compliant
- Dipole configuration
- Very long read range
- Good orientation insensitivity
- Designed to work in environment with high density of tags
- Supports Impinj dies
- Based on the Thin Propeller™ design by Impinj

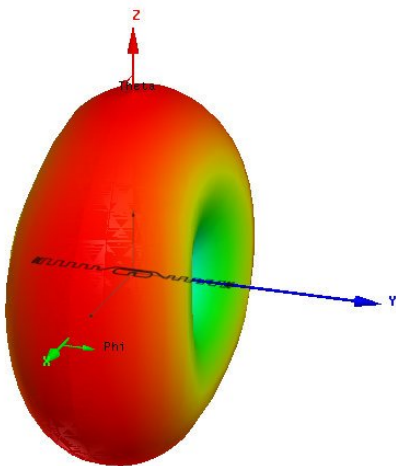
### Applications

- Logistics

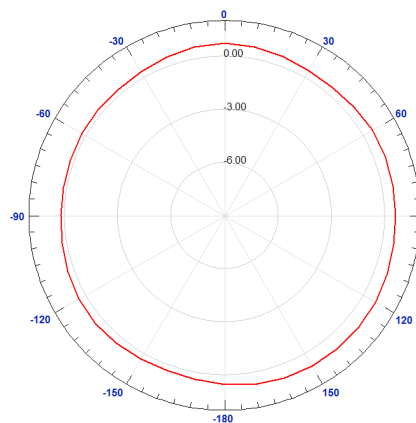
### Inlay Layout and Dimensions

	UH103
Antenna width	91.5 mm ± 0.5 mm (3.60 ± 0.02 in)
Antenna length	7.5 mm ± 0.5 mm (0.29 ± 0.02 in)
Lengthwise pitch	tbd
Web width	tbd

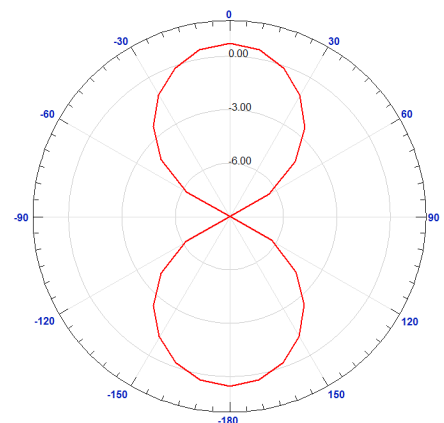
3D Radiation pattern



[Z,X] Radiation pattern



[Y,Z] Radiation pattern





## Inlay Composition

Composition	Material	Thickness* [µm]
Top	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

	Impinj Monza 3	Impinj Monza ID	Impinj Monaco64
Product code	UH103-MZ3	UH103-MZID	UH103-MO64
Operating frequency	860 ÷ 960 MHz		
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C		
Thickness	150µm ± 15µm	150µm ± 15µm	150µm ± 15µm
Operating temperature	-40 °C to +65 °C	-40 °C to +65 °C	-40 °C to +65 °C
Storage temperature	-40 °C to +85 °C	-40 °C to +85 °C	-40 °C to +85 °C
Unique serial number	n/a	8 bytes in User Memory bank	n/a
EPC code	96 bits	96 bits	96 bits
User memory	n/a	8 bytes factory locked (UID)	64 bits (8 bytes)
TID	32 bits (locked)	32 bits (locked)	32 bits (locked)
Reserved memory	64 bits (for Kill and Access passwords)	112 bits (locked for factory use)	64 bits (locked to zero)
Write endurance	50 years	50 years	50 years
Data retention	100 000 cycles	100 000 cycles	100 000 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)