

Inlay Features

- EPC Class1 Gen2 compliant
- Very small form factor and good read range (< 2m)
- Optimized performance when attached to different materials (non metallic)
- Designed to work in environment with high density of tags
- Supports Impinj dies

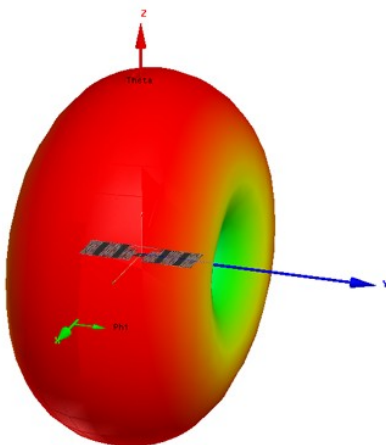
Applications

- Item-level logistics
- Apparel applications

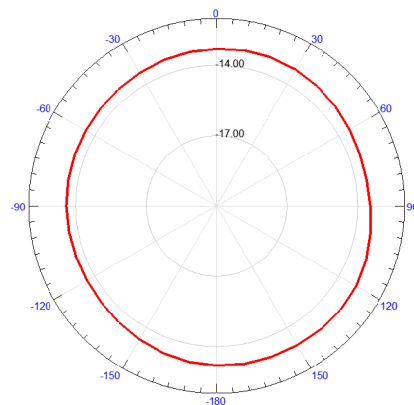
Inlay Layout and Dimensions

	UH600
Antenna width	29 mm ± 0.5 mm (1.13 ± 0.02 in)
Antenna length	9 mm ± 0.5 mm (0.36 ± 0.02 in)
Lengthwise pitch	20.3 mm
Web width	37.5 mm

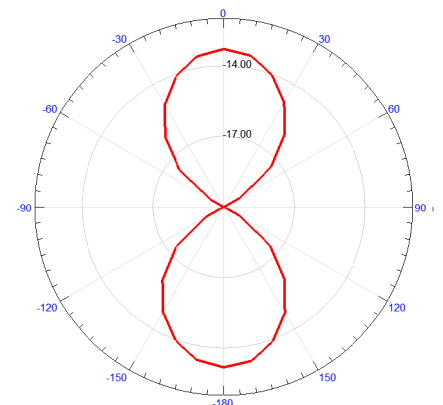
3D Radiation pattern



[Z,X] Radiation pattern



[Y,Z] Radiation pattern





INLAY UHF - UH600

Inlay Composition

Composition	Material	Thickness* [μm]
Top	Aluminium	$9 \pm 5\%$
Support	Polyester PET	$38 \pm 5\%$

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

Available ICs

	Impinj Monza 3	Impinj Monza 4D	Impinj Monza 4E	Impinj Monza 4QT
Product code	UH600-MZ3	UH600-MZ4D	UH600-MZ4E	UH600-MZ4QT
Operating frequency	860 ÷ 960 MHz			
Standard compliance	EPC Class 1 Gen2 – ISO 18000-6C			
Thickness	$150\mu\text{m} \pm 15\mu\text{m}$	$100\mu\text{m} \pm 15\mu\text{m}$	$100\mu\text{m} \pm 15\mu\text{m}$	$100\mu\text{m} \pm 15\mu\text{m}$
Operating temperature	$-40\text{ }^\circ\text{C}$ to $+65\text{ }^\circ\text{C}$	$-40\text{ }^\circ\text{C}$ to $+85\text{ }^\circ\text{C}$	$-40\text{ }^\circ\text{C}$ to $+85\text{ }^\circ\text{C}$	$-40\text{ }^\circ\text{C}$ to $+85\text{ }^\circ\text{C}$
Unique serial number	n/a	6 bytes in TID bank	6 bytes in TID bank	6 bytes in TID bank
EPC code	96 bits	128 bits	496 bits	128 bits
User memory	n/a	32 bits	128 bits	512 bits
TID (locked)	32 bits	96 bits	96 bits	96 bits + 96 rw bits for public EPC
Reserved memory	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)	64 bits (for Kill and Access passwords)
Write endurance	50 years	50 years	50 years	50 years
Data retention	100 000 cycles	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	10000 \pm 10% (custom sizes available upon request)