



# RAIN RFID (UHF) Inlays & Tags

## Product Range

SMARTRAC's RAIN RFID inlays and tags offer market-leading performance and memory options, and are available with a wide variety of high-performance IC platforms. Each product has a unique TID and a broadband RFID antenna design that enables end users to reach and sustain consistently high levels of performance, in all global UHF frequency regions, with the same tag. This represents a significant competitive and operational advantage for almost any enterprises dealing with manufacturing, distribution and customers located in different parts of the world. The same RFID tag can be used by the manufacturer, the logistics service provider and the retailer, to track and identify products accurately and cost-efficiently throughout the supply chain at item level.

In conjunction with Metrics, a solution based on SMARTRAC's enablement platform SMART COSMOS, RAIN RFID inlays and tags can enhance control throughout the supply chain, from product inventory management for warehouses through product authentication.

SMARTRAC's operations are certified to ISO 9001:2015 Quality Management System standards and ISO 14001:2015 Environmental Management System standards.

#### Overview

### Operating Frequency 860 - 960 MHz

#### International Standards

ISO 18000-6C EPC Class 1 Gen 2

### Typical End-user Areas

- ▶ Healthcare
- Industrial Applications
- Retail
- Supply Chain & Asset Management
- ... and many more.

\*RAIN RFID is a wireless technology that connects billions of everyday items to the internet, enabling businesses and consumers to identify, locate, authenticate, and engage each item. RAIN technology is based on the UHF RFID protocol standard. (Source: rainrfid.org/about-rain/what-is-rain/)

Inlays and Tags smartrac-group.com



# RAIN RFID (UHF) Inlays & Tags

Product Range (selection)

Product Name	IC	Antenna & Die-cut Size
TRAP	Impinj Monza® 4 family	8 × 22 mm / 0.3 × 0.9"
		$11 \times 25 \text{ mm} / 0.4 \times 1.0$ "
ACCESSORY	Impinj Monza R6 family	30 × 15 mm / 1.2 × 0.6"
		$33 \times 18 \text{ mm} / 1.3 \times 0.7$ "
BLING	Impinj Monza R6 family	22 × 12 mm / 0.9 × 0.5"
		$25 \times 15 \text{ mm} / 1.0 \times 0.6$ "
MINIWEB	NXP UCODE® G2iL,G2iM	40 × 18 mm / 1.6 × 0.7"
	$7$ , $7 \times m$ , $7 \times m+$ , DNA	$43 \times 21 \text{mm} / 1.7 \times 0.8$ "
	Impinj Monza R6 family	$42 \times 16 \text{ mm} / 1.7 \times 0.6$
		$43 \times 21 \text{mm} / 1.7 \times 0.8$ "
FLY	NXP UCODE 7×m,	12 × 12 mm / 0.5 × 0.5"
	7×m+, DNA	15 × 15 mm / 0.6 × 0.6"
GRILLE	NXP UCODE 7×m,	$22 \times 22 \text{ mm} / 0.9 \times 0.9$ "
	7×m+, DNA	25 × 25 mm / 1.0 × 1.0"
WEB	Impinj Monza 4, R6 family	$30 \times 50 \text{ mm} / 1.2 \times 2.0$ "
	NXP UCODE G2iL, G2iM, 7	34 × 54 mm / 1.3 × 2.1"
BELT	Impinj Monza R6 family	$70 \times 10 \text{ mm} / 2.76 \times 0.39$ "
		$73 \times 13 \text{ mm} / 2.87 \times 0.51$ "
	NXP UCODE G2iL, G2iM,	$70 \times 14 \text{ mm} / 2.8 \times 0.6$ "
	7, 7×m, 7×m+, DNA	73×17 mm / 2.9×0.7"
ON-METAL TAG	Impinj Monza 4QT	$95 \times 40 \text{ mm} / 3.74 \times 1.58 $
	ETSI & FCC band	98 × 43 mm / 3.86 × 1.69 "
FROG 3D <sup>TM</sup>	Impinj Monza 4 family	$50 \times 50$ or $68 \times 68$ mm /
		$1.97 \times 1.97$ or $2.68 \times 2.68$ "
		$53 \times 53$ or $76 \times 76$ mm /
		$2.09 \times 2.09 \text{ or } 3.00 \times 3.00$ "
SHORTDIPOLE	Impinj Monza 4, R6 family	93 × 11 mm / 3.7 × 0.4"
	NXP UCODE G2iL,	$97 \times 15 \text{ mm} / 3.8 \times 0.6$ "
	G2iM, 7	
DOGBONE™	Impinj Monza 4 & R6 family	94 × 24 mm / 3.7 × 0.9"
	NXP UCODE G2iL, G2iM,	$97 \times 27 \text{ mm} / 3.8 \times 1.1$ "
	$7,7\times m,7\times m+$ , DNA	
	TRAP  ACCESSORY  BLING  MINIWEB  FLY  GRILLE  WEB  BELT  ON-METALTAG  FROG 3D <sup>TM</sup> SHORTDIPOLE	TRAP Impinj Monza® 4 family  BLING Impinj Monza R6 family  MINIWEB NXP UCODE® G2iL,G2iM 7, 7×m, 7×m+, DNA Impinj Monza R6 family  FLY NXP UCODE 7×m, 7×m+, DNA  GRILLE NXP UCODE 7×m, 7×m+, DNA  WEB Impinj Monza 4, R6 family NXP UCODE G2iL, G2iM, 7  BELT Impinj Monza R6 family  NXP UCODE G2iL, G2iM, 7, 7×m, 7×m+, DNA  ON-METAL TAG Impinj Monza 4 QT ETSI & FCC band  FROG 3D™ Impinj Monza 4, R6 family NXP UCODE G2iL, G2iM, 7  DOGBONE™ Impinj Monza 4, R6 family NXP UCODE G2iL, G2iM, 7  DOGBONE™ Impinj Monza 4 & R6 family NXP UCODE G2iL, G2iM, 7  DOGBONE™ Impinj Monza 4 & R6 family NXP UCODE G2iL, G2iM, 7  DOGBONE™ Impinj Monza 4 & R6 family NXP UCODE G2iL, G2iM,

Additional memory, protocol and product configurations are available upon request. | Note: Pictures are for illustration only and are not to scale.

#### **IC Total Memories**

- Impinj Monza 4D 128 bit EPC + 32 bit
- ▶ Impinj Monza 4QT 128 bit EPC + 512 bit ▶ NXP U-Code 7 128-bit EPC
- Impinj Monza R6 96 bit EPC
- Impinj Monza R6-P128 bit EPC + 32 bit 2048 bit user memory
- NXP U-Code G2iL 128 bit EPC
- ▶ Impinj Monza 4E 496 bit EPC + 128 bit 
  ▶ NXP U-Code G2iM 256 bit EPC + 512 bit

  - NXP UCODE 7XM 448bit EPC,
- NXP UCODE 7XM+ 448bit EPC, 2048 bit user memory, incl. digital signature
- NXP UCODE DNA 224 bit EPC 3072 bit user memory

## Contact: Sales & Customer Service

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