



# METAL SKIN TITANIUM

## Technical Specifications

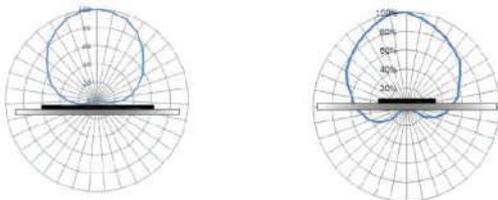
- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 902-928 MHz (US);  
865-868 MHz (EU)

### NXP version:

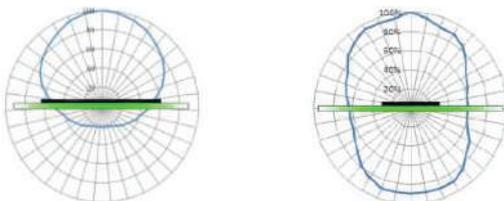
- IC type (chip)<sup>1</sup> NXP UCODE 9
- Chip memory<sup>2</sup> 96 bits EPC; 96 bits TID
- Read range on metal<sup>3</sup> Up to 8.20 ft (2.50 m)
- Read range off metal<sup>3</sup> Up to 3.28 ft (1 m)

### Impinj version:

- IC type (chip)<sup>1</sup> Impinj M730
- Chip memory<sup>2</sup> 128 bits EPC; 96 bits TID
- Read range fixed<sup>3</sup>  
Up to 12.47 ft (3.80 m) on metal
- Read range handheld<sup>3</sup>  
Up to 3.28 ft (1 m) on metal
- **Polarization** Linear
- **Radiation pattern**



Off metal-Horizontal / Vertical



## Key Features

- + **Small size:** fits small asset
- + **Printable:** human and computer-readable
- + **Flexible label:** for curved surfaces
- + **Cost effective:** for high volume
- + **IP68 rating:** waterproof

## Applications

- Product authentication
- IT asset and laptop tracking
- Radio and mobile equipment
- Foil-based packaging tracking



## Environmental Specifications

### Temperatures



- Operational -40°C to +85°C
- Survival -40°C to +85°C

- IP rating IP68
- Storage Humidity 50±15%RH
- Compression strength 58 psi (400 kPa)
- Printer compatibility SATO CL4NX, Zebra ZT410 Silverline, Postek TX3r, etc.
- Vibration MIL-STD-810G
- Warranty 1 year

<sup>1</sup>The chip data retention is up to 50 years, based on chip operating under general environment conditions.

<sup>2</sup>EPC can be re-programmed or permanently locked, can not be password protected. TID is locked and unique at the point of manufacturing.

<sup>3</sup>Actual read range may vary based upon use case and antenna power.

## Physical Specifications

- Material** White thermal transfer face stock

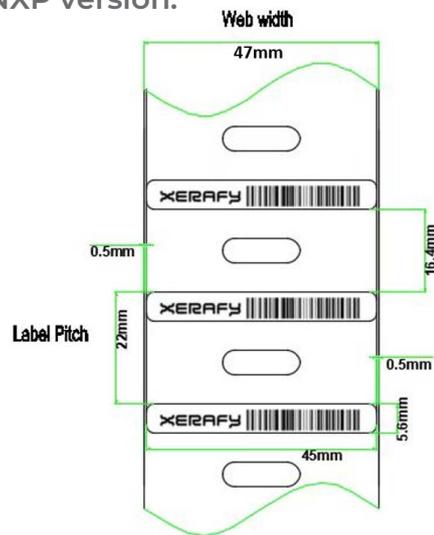
### NXP version:

- Dimensions (in)<sup>1</sup> 1.77 x 0.22 x 0.04
- Dimensions (mm)<sup>1</sup> 45 x 5.60 x 1
- Packaging 500pcs/roll
- Weight (roll) 0.88 lbs (0.40 kg)

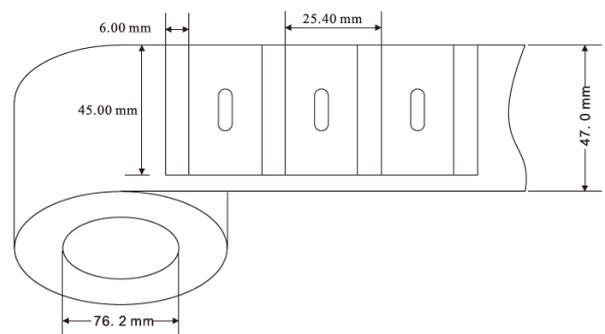
### Impinj version:

- Dimensions (in)<sup>1</sup> 1.77 x 0.24 x 0.04
- Dimensions (mm)<sup>1</sup> 45 x 6 x 1
- Packaging 500pcs/roll
- Weight (roll) 1.65 lbs (0.75 kg)

### NXP version:



### Impinj version:





## Mounting Systems

- Industrial adhesive

### Installation Instructions

1. Clean the surface using Isopropyl alcohol, alcohol pad or equivalent solvent to ensure surface is free from dirt, dust, oil and misc, debris that may affect adhesion.
2. Handle the label by edges, peel release liner from back ensuring not to touch the adhesive.
3. Place the label in desired tagging location and firmly apply even pressure to the label for 5 seconds.
4. Do not disturb the newly mounted label for at least 15 minutes to ensure proper adhesive seating.

<sup>1</sup> Tolerance: +/- 0.02; +/- 0.50

<sup>2</sup> Tolerance: H=0.04(+/- 0.004); H=1(+/- 0.100)

### Industry Compliance



### Order Information

#### NXP version

METAL SKIN Titanium US: X5220-US100-U9

METAL SKIN Titanium EU: X5220-EU100-U9

#### Impinj version

METAL SKIN Titanium US: X4506-US011-M730

METAL SKIN Titanium EU: X4506-EU011-M730

### Customization Options

Encoding

Printing

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