



METAL SKIN MERCURY

Technical Specifications

- **RF protocol** ISO/IEC 18000-6C (EPC Gen2)
- **Frequency** 902-928 MHz (US);
865-868 MHz (EU)

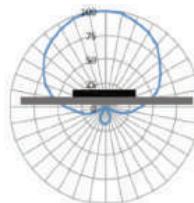
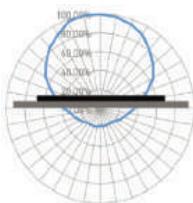
NXP:

- IC type (chip)¹ NXP UCODE 9
- Chip memory² 96 bits EPC, 96 bits TID
- Write cycles 100,000 times
- Data retention 20 years
- Read range on metal³ Up to 26.25 ft (8 m)
- Read range off metal³ Up to 19.69 ft (6 m)

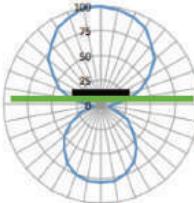
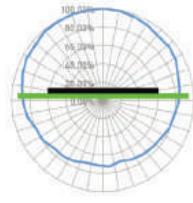
Impinj:

- IC type(chip)¹ Impinj Monza R6-P
- Chip memory² 128 bits EPC; 96 bits TID; 32 bits user memory
- Write cycles 100,000 times
- Data retention 50 years
- Read range on metal³ Up to 26.25 ft (8 m)
- **Polarization** Linear
- **Radiation pattern**

On metal-Horizontal / Vertical



Off metal-Horizontal / Vertical



Key Features

- + **Flexible label:** for curved surfaces
- + **Multi-surface:** on metal or on liquid
- + **8 m read range:** read from a distance
- + **Printable:** human and computer-readable
- + **IP68 rating:** waterproof

Applications

- **Global supply chain**
- **Logistics**
- **Datacenter servers**
- **E-commerce**

Environmental Specifications

Temperatures



- Operational -40°C to +85°C
-40°F to +185°F
- Survival -40°C to +85°C
-40°F to +185°F

- **IP rating** IP68
- **Storage Humidity** 50±15%RH
- **Compression strength** 92 psi (634 kPa)
- **Vibration** MIL-STD-810G
- **Printer compatibility** SATO CL4NX, Zebra ZT411R, Postek TX3r, TSC Printronix T6000e, etc.
- **Warranty** 1 year

¹ The chip data retention is based on the chip operating under general environment conditions.

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

³ Actual read range may vary based upon use case and antenna power.

Physical Specifications

- **Material** White thermal transfer face stock

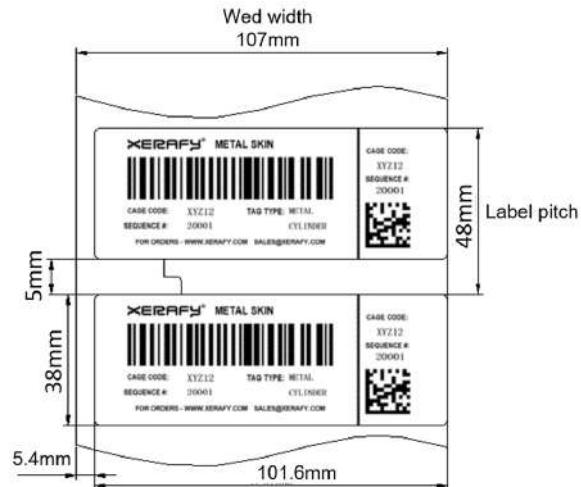
NXP:

- Dimensions (in)¹ 4 x 1.50 x 0.04
- Dimensions (mm)² 101.60 x 38 x 1
- Packaging 300pcs/roll
- Weight (roll) 1.98 lbs (0.90 kg)

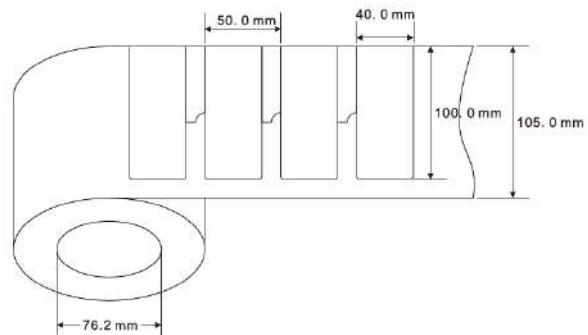
Impinj:

- Dimensions (in)¹ 3.94 x 1.57 x 0.04
- Dimensions (mm)² 100 x 40 x 1
- Packaging 300pcs/roll
- Weight (roll) 2.65 lbs (1.20 kg)

NXP:



Impinj:



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.

¹ Tolerance: Length/Width= +/- 0.02; Thickness= +/- 0.008

² Tolerance: Length/Width= +/- 0.50; Thickness= +/- 0.200

Industry Compliance



Order Information

NXP

METAL SKIN Mercury US: X51A0-US100-U9

METAL SKIN Mercury EU: X51A0-EU100-U9

Impinj

METAL SKIN Mercury US: X1040-US011-R6P

Customization Options

Encoding

Printing

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