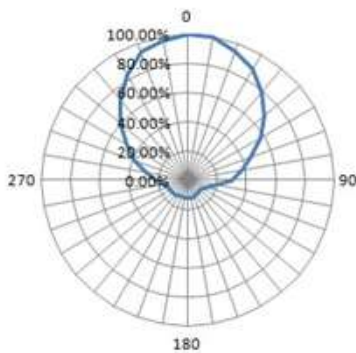# MICRO MEDICAL

Technical Specifications

- **RF protocol** EPC global Class 1 Gen 2
- **Frequency** 860-960 MHZ (Global)
- **IC type** (chip)[1] Impinj M781
- **Chip memory**[2] 128 bits EPC, 96 bits TID, 512 bits user memory
- **Read range** on metal[3] Up to 13.12 ft (4 m)
- **Read range** off metal[3] Up to 16.40 ft (5 m)
- **Write cycles** 100,000 Times at 77°F (25°C)
- **Polarization** Linear
- **Radiation pattern on metal**

Key Features

+ **Co-developed with medical device manufacturers:** survive reprocessing cycles (chemicals, steam, autoclave)

+ **Medical-grade materials:** autoclave-proof

+ **IP69K:** high-pressure washing

+ **Stainless steel:** for secure mounting

+ **On metal and plastics:** up to 5 meters read range

Applications

• **Surgical tray management**

• **Medical device tracking**

Environmental Specifications

Temperatures
- Operational -40°C to +85°C
- Survival -40°C to +150°C

- **IP rating** IP69K
- **Shock** 3ft (1 m) to concrete/granite
- **Vibration** MIL-STD-810G
- **Warranty** 1 year

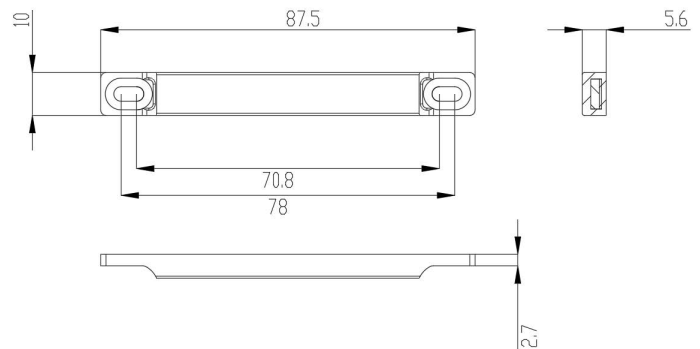[1] The chip data retention is up to 50 years, based on chip operating under general environment conditions.
[2] EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.
[3] Handheld reader

Physical Specifications

- **Material** Industry grade polymer, Stainless steel
- **Dimensions (mm)**[1] 87.50 x 10 x 5.60
- **Rivet hole diameter** L: 7 mm, R: 1.70 mm
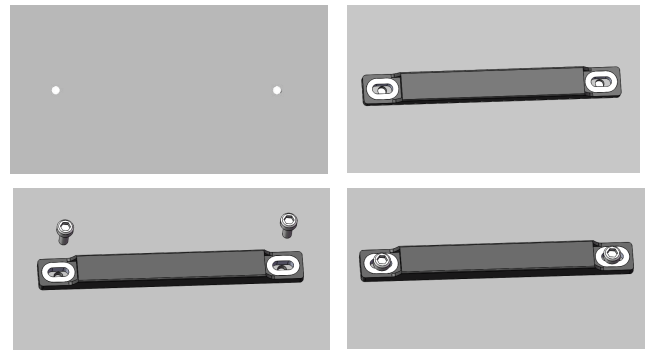- **Weight** 8.50 g

Mounting Systems

· Pop rivets

· Screws

· Cable and zip ties

· Industrial adhesives (optional)

Installation Instructions

1. Use M3 rivets for attachment:
· Drill two holes (ø 3.50) in the metal surface, pitch: 70.80-78.00 (± 0.20) mm.
· Utilize M3 rivets in conjunction with a rivet gun to securely fasten the tag onto the metal surface.
2. Use M3 screws for attachment:
· Drill two holes (ø 2.20) in the metal surface, pitch: 70.80-78.00 (± 0.20) mm.
· Perform a M3 thread tapping procedure.
· Utilize M3 screws to securely attach the tag to the metal surface.

[1] Tolerance: +/- 0.02; +/- 0.50

Industry Compliance

Order Information

MICRO Medical (Global): X0353-GL100-M781

Customization Options

Encoding

Laser Etching