





# **XPLATE**

## **Technical Specifications**

- RF protocol EPC global Class 1 Gen 2
- Frequency 902-928 MHz (US); 865-868 MHz (EU)
- IC type (chip) Impinj M750
- Chip memory<sup>2</sup> 96 bits EPC; 96 bits TID; 32 bits user memory
- Read range on metal<sup>3</sup> Up to 32.81 ft (10 m)
- Read range off metal<sup>3</sup> Up to 19.69 ft (6 m)
- Polarization Linear
- Radiation pattern

# On metal Off metal Phi=270 Phi= 90 Phi=270

### **Key Features**

- + Multidirectional: wider read angles
- + 10 m read range: read from a distance
- + Aluminum or stainless metal plate
- + Customizable: emboss, stamp, print,
- + IP68 rating: waterproof

## **Applications**

- Tooling machinery
- **Manufacturing equipment**
- **Shipping container**
- **Construction equipment**
- Utilities

## **Environmental Specifications**

#### **Temperatures**



- Operational -40°C to +85°C
- Survival -40°C to +85°C (168 hours)
- Peak 100°C (100 hours)

#### Chemicals 4



- 24h H<sub>2</sub>SO<sub>4</sub> (10% sulfuric acid)
- 24h HNO3 (10% nitric acid).
- 24h H<sub>3</sub>PO<sub>4</sub> (20% phosphoric acid)
- 24h H2O2 (25% hydrogen peroxide)
- 24h NaOH (10% sodium hydroxide)
- **IP** rating IP68
- Compression strength 181 psi (1250 kPa)
- Shock 3 ft (1 m) to concrete/granite
- Vibration MIL-STD-810G
- Warranty 1 year

<sup>&</sup>lt;sup>3</sup> Performance based on standard testing methodologies. Performance may vary depending on environmental factors and reader output power. <sup>4</sup>The chemical resistance is based on the concentration of solutions and application environment. Please contact Xerafy for further details on chemical resistance.



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

 $<sup>\</sup>frac{2}{2}$  EPC can be re-programmed, password protected, or permanently locked. TID is locked and unique at the point of manufacturing.

# **Physical Specifications**

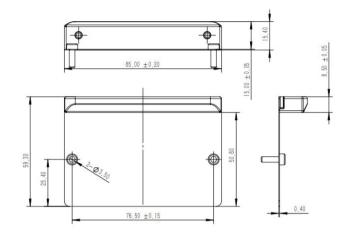
- Material Industry grade polymer, Aluminum or stainless steel plate
- **Dimensions (in)**¹ 3.35 x 2.31 x 0.61, 3.35 x 2 (metal plate)
- **Dimensions (mm)**<sup>1</sup> 85 x 59.30 x 15.40, 85 x 50.80 (metal plate)
- Weight 0.42 oz (11.80 g)
- Color Dark gray

#### **Mounting Systems**

- Pop rivets
- · Screws
- · Welding, adhesive (optional)

#### Installation Instructions

- 1. Use M3 rivets for attachment:
- · Drill two holes (ø 3.50) in the metal surface, pitch: 76.50 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: 76.50 mm.
- ·Perform a M3 thread tapping procedure.
- ·Utilize M3 screws to securely attach the tag to the metal surface.





# **Industry Compliance**



















## **Order Information**

XPLATE US (aluminum): X8001-US100-M750

XPLATE US (stainless steel): X8002-US100-M750

XPLATE EU (aluminum): X8001-EU100-M750

XPLATE EU (stainless steel): X8002-EU100-M750

### **Customization Options**

Encoding

Aluminum or Stainless Steel Plate

Embossing

Printing

Adhesives (optional)

**Password Locking** 

**Plate Size** 

Stamping

Laser Marking

**ATEX Certified Version** 

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